KAZAKOV, V.D.; KUZNETSOV, O.P.

List of foreign literature on relay devices and finite automata for 1958. Avtom. i telem. 21 no.9:1332-1338 S '60.
(MIRA 13:10)

(Bibliography--Automatic control)

33505

S/562/61/000/009/005/012
D201/D302

16.6800 (1024, 1121, 1329, 2403)

AUTHOR: Kuznetsov, O. P.

TITLE: Asynchronous logical nets

SOURCE: Akademiya nauk SSSR. Laboratoriya sistem peredachi informatsii. Problemy peredachi informatsii. No. 9, 1961, Elementy sistem avtomatiki, 103-115

TEXT: The author gives an analysis of a logical net in which the delays are not equal and which he calls asynchronous nets. Two types of binary elements are introduced: a) Logic elements and b) elements of delay which operate as follows: The inputs and the production of outputs are continuous. The value of the output of a logic element at instant t is represented by a certain logic function of its inputs at instant t. The delay element has one input Y. 1) The value of the delay output y(t) at instant t is given by 1) $y(0) = c(c = 1 \text{ or } c = 0)$; 2) y changes at instant $t + \tau$ from 0 to 1 (1 to 0) only if at the instant t Y has changed from 0 to 1 (or 1 to 0) and remained unchanged during the interval from t to $t + \tau$.

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Asynchronous logical nets

S/562/61/000/009/005/012
D201/D302

τ is called the delay time. The net obtained from elements of type a) and b) by using the rules of forming "regular construction nets" is called the asynchronous logical net (ALN). The sequence of input signals is called the input sequence, if to every two adjacent signals in the sequence there corresponds two last periods. The state of the ALN at instant t is an orderly sequence $y_1(t),\ldots,$ $y_n(t)$ at instant t of outputs from the delays. The time interval between two adjacent changes of state is called the period. The sequence of n-dimensional vectors 0 or 1, is called the ALN state sequence. The ALN correspond to relay operated circuits with delays of various duration and may find practical applications. There are 3 figures and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: A. W. Brooks and G. B. Wright, The theory of logical nets, Proc. IRE, 1953, v. 41, 10.

Card 2/2

KAZAKOV, V.D.; KUZNETSOV, O.P.

List of Russian works on the theory of switching circuits and finite automata for 1959. Avtom. i telem. 22 no.2:275-277 F '61.
(MIRA 14:4)
(Bibliography--Automatic control)
(Bibliography--Switching theory)

KUZNETSOV, O. P.

"On a certain class of regular events"

report submitted for the Intl. Symposium on Relay Systems and Finite Automata Theory (IFAC), Moscow, 24 Sep-2 Oct 1962.

ARCHIVE COPY

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KUZNETSOV, O. S. /In 1959 at the Mathematical Institute imeni V. A. Steklov, Academy of Sciences USSR/- "The use of computer for research in mechanical translation" (Invited paper, Session 9)

KUZNETSOV, O. P., Institute of Automatics and Telemechanics, Academy of Sciences USSR /1960 position/- "On the asynchronous logical circuits" (Session 11 or 20)

MIKHALEVICH, V. S., Head, Economic Cybernetic Section, Computer Center, Academy of Sciences Ukrainian SSR, Kiev /1961 position/- "A method of successive analysis of variants for numerical solution of the problems of optimal planning and designing" (Session not indicated)

SOBOLEV, S. L., Institute of Mathematics and Computation Center, Siberian Department, Academy of Sciences USSR, Novosibirsk - "Investigation of the written language of ancient Maya with the aid of computers" (Session 38)

SPIRIN, A. A., Scientific Research Institute of Computer Machine Building, Moscow /1961 position/- "Technical means and organization of centralized system for data processing in industry" (Session 25)

TIMOFEYEV, A. A. /Received Candidate's degree in 1961 from Moscow Higher Technical School imeni N. E. Bauman/- "Microprogramming control in digital computers" (Session 42)

report to be submitted for the 2nd Intl. Congress for Information Processing, IFIPS, Munich, West Germany, 27 Aug - 1 Sep 1962.

KAZAKOV, V.D.; KUZNETSOV, O.P.

List of foreign literature on the theory of switching devices and finite automata for 1959-1960. Avtom. i telem. 24 no.5: 699-712 My '63. (MIRA 16:6)

(Bibliography—Switching theory)
(Bibliography—Automatic control)
(Bibliography—Electric relays)

ACCESSION NR: AT4031764 S/0000/63/000/000/0074/0099

AUTHOR: Kuznetsov, O.P.

TITLE: Relay devices and finite automata

SOURCE: AN SSSR. Strukturnaya teoriya releyny*kh ustroystv (Structural theory of relay devices). Moscow, Izd-vo AN SSSR, 1963, 74-99

TOPIC TAGS: control system, automatic control, feedback, relay, automaton, finite automaton, black box problem

ABSTRACT: The article deals with several fundamental results achieved in the theory of automata and their interpretation in terms of relay devices. In the first section of the paper, the author has analyzed different models of finite automata, the concept of the event and the formulation of the problem of synthesis. It is shown that the evolution of the theory of such automata began with the investigation of abstract nerve nets (W. McCulloch, W. Pitts. A logical calculus of ideas immanent in nervous activity. "Bull. Math. Biophys.", v. 4. S. 1943, p. 115-123; S. Kleene. Representation of events in nerve nets and infinite automata. Automata Studies Princeton, 1956). The concept of the "finite automaton" (a term introduced for the first time by S. Kleene) is examined.

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ACCESSION NR: AT4031764

The Moore model (Moore sequential machine) is discussed and described (E. Moore. Gedanken-experiments on sequential machines. Automata Studies. Princeton, 1953) and the Mealy model is defined (G. Mealy. A method for synthesizing sequential circuits. "Bell System Tech. J," v. 34, no. 5, p. 1045-1079). The work of Yu. T. Mendeleyev on events representable in finite automata is placed in proper perspective in terms of the general discussion of the problem (Yu. T. Mendeleyev. O klasse soby*tiy, dopuskayushchikh predstavleniye v konechnom avtomate. Sb. "Avtomaty*", dobavleniye 2, 1956). The application of the flow table, introduced by D. Huffman (D. Huffman. Synthesis of sequential switching circuits. J. Franklin Institute, v. 257, no. 3, p. 161-190; no. 4. p. 275-303, 1954), to the investigation of sequential relay devices is discussed and the use of such tables is described. Various definitions of an "event" are given. These definitions are taken, for the most part, from the writings of Kleene and Mendeleyev. In this connection, the importance of the concept of "regularity" (in terms of a regular event) is shown to be determined by the following two theorems: 1) For every regular event there exists a finite automaton to represent it; 2) Every event representable in some finite automaton is regular. Both theorems are proven and discussed. Further theorems (again taken primarily from the work of S. Kleene referenced above) are analyzed in terms of the algorithmization of abstract automata synthesis according to a given finite system of regular events; for example: For every definite event there

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exists a nerve net without loops; and, for every given nerve net without loops and every given internal neuron of this net, excitation of this neuron is equivalent to the advent of some definite event. The work, in this area, of V. M. Glushkov (V.M. Glushkov. Ob odnom algoritme sinteza abstraktny*kh avtomatov. Ukr. matem. zhurnal, no. 2, 1960) is considered, along with an analysis of the technical applications of the theory of abstract nerve nets to the theory of logical circuits. Logical and delay elements are considered, and it is shown that the physical realization of logical nets is found in devices with pulse condition, in which the transmission of information is possible in one direction only. The author notes that, after the problem of representability had been solved in principle (by S. Kleene), two fundamental problems of automata synthesis have emerged: the search for various languages in which to write the events and the construction of automata to perform assigned operating conditions with a minimal number of states. An analysis is given of certain of the results achieved in this area by Yu. T. Mendeleyev, N. Ye. Kobrinskiy and B. A. Trakhten. brot (N. Ye. Kobrinskiy, B. A. Trakhtenbrot. O postroyenii obshchey teorii logicheskikh setey. Sb. "Logicheskiye issledovaniya", 1959), A. Church in a number of articles, E. Berkley (E. Berkley. The algebra of states and events. "Amer. Math, Monthly", v. 78, no. 4, 1954) and others. The author's view of this problem area may, perhaps, be summarized as follows: In the synthesis of single-cycle devices, for the inscription of the operating conditions a standard language is employed - a Boolean function, assigned in the form of a formula or a table. The problem of synthesis thus is

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reduced to one of minimization. For automata, synthesis becomes more complex. While for single cycle devices it is always possible to assign a finite list of input symbols and corresponding outputs, the list of possible symbol sequences (that is, an event) may be infinite, and its structural or design assignment resolves itself to the problem of devising (constructing) a language in which infinite lists are given by finite formulae. The second source of complexity is seen by the author in the fact that not all events are susceptible of representation in an automaton - whence the second requirement of the language: in it it must be possible to distinguish representable events from those which cannot be represented. In the language of regular events, this problem is solved in a simple fashion: non-representable events are not described in it; that is, the very fact that a formula exists which corresponds to a certain event is evidence of the representability of that event. However, the author notes, this is not always the case. For example, in a language in which it is possible to describe all events (such a language will contain recursive definitions) the problem of recognizing the representability of events cannot be solved algorithmically. With respect to the advantages of the languages proposed by the various authors and considered in this article by way of review, that is, the possibilities of a simple transition from a verbal formulation of the conditions of operation to an economical base formula, it is, in the author's view, senseless to search for a universally simple language, since problems will always be found which can be more simply described by

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another language. The selection of one language over another will in all likelihood be determined not by individual and separate problems, but by the possibility and ease with which a large number of different working conditions can be classified by the terms of the particular language. The second part of the article deals with the analysis and minimization of finite automata. The so-called "black box" problem is considered, with the author presenting the results, employed, as he claims, without strict proof, by Huffman, in the formulation of G. Mealy. The author concludes that, according to the theory of finite automata, a relay contact system is a particular form of finite automaton. The circuitry of the automaton is derived by assigning to each state a binary number representing an ordered set of intermediate element states. Since this attribution is arbitrary (with the limitation that one number cannot be ascribed in two states), corresponding to an automaton, given by a flow table, will be an infinite number of devices, different in structure but equivalent in action. The particular attribution depends on our requirements of the structure of the device: do we wish completely to eliminate race conditions, obtain a maximally simple logic part of the device, achieve protection against a given number of faults on the part of the elements of the device, etc. It is, however, preferable to minimize the number of states before the attribution. In this case, all methods of finite automata minimization are applicable to relay-contact devices. On the other hand, the methods of synthesis existing in the theory of automata cannot be unconditionally applied to such devices, since these methods effectively synthesize not the abstract finite

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automaton,that is, the flow matrix (or table), but a particular instance of the finite automaton - the logical net; that is, a synchronous automaton. Asynchronous automata, however, (particularly, relay-contact devices) differ from the synchronous in a number of properties, connected with the fact that asynchronous automata operate not in pulse, but in potential mode. In sum, the fundamental problems of the first step in the synthesis of relay-action devices (ending with the coding of the states) may, in the opinion of the author, be formulated as follows: 1) The search for effective logico-mathematical languages which will make it possible to write the operating conditions in terms of input and output sequences and to obtain, from this method of writing, tables which will define the automaton; that is, a state table (flow table) and output table. 2) The minimization of the flow table of the automaton, for which not all input sequences are permissible. 3) Optimal state coding by binary numbers in order to reduce the number of logical elements of the automaton (in the case of a relay-contact system - the minimization of the contact part), and to secure the construction of reliable structures and the elimination of race conditions. Orig. art. has: 11 tables, 11 formulas and 12 figures.

ASSOCIATION: None

Card 6/7

POSTCARD

ACCESSION NR: AT4031765 S/0000/63/000/000/0100/0109

AUTHOR: Kuznetsov, O. P.

TITLE: One class of regular events

SOURCE: AN SSSR. Strukturnaya teoriya releyny*kh ustroystv (Structural theory of relay devices). Moscow, Izd-vo AN SSSR, 1963, 100-109

TOPIC TAGS: control system, automatic control, relay, regular event, nerve net, finite automaton

ABSTRACT: The concept of the regular event was introduced by S. Kleene (Representation of events in nerve nets and finite automata. Princeton, 1956), who demonstrated that the class of regular events coincides with the class of events which may be represented in a finite automaton. This result was later refined (V. M. Glushkov. Ob odnom algoritme sinteza abstraktny*kh avtomatov. Ukr. matem. zhurnal, no. 2, 1960) and it was shown that for any system of regular events, containing N letters of the input alphabet, an automaton can be constructed to represent this system, with a number of states $\leq 2N + 1$. While it

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can easily be demonstrated that the number of states can be reduced by a factor of four, its exact value is as yet unclear. Noting the interest in determining the subclasses of regular events with a simpler estimation of the number of states of the corresponding automatic devices, the author has given such an estimate in the present article for a class of definite (in the sense of Kleene; see reference above) occurrences; that is, occurrences of the type <J> A, where J is a union of all the letters of the alphabet, and A is a formula which contains no iterations. The approach to the problem rests on the assumption that the automaton is represented by a transition diagram (flow table), that is, by an oriented graph, the apices of which correspond to the states, and the ribs — to the transitions from one state to the other. Corresponding to each such graph the author postulates a matrix C of unions and a matrix C* of paths (O. P. Kuznetsov. Releyny*ye ustroystva i konechny*ye avtomaty* (this collection)). Element C_{ij} of matrix C is the union of the weights of all the ribs leading from state s_i to state s_j; element c_{ij} * is the union of all the paths leading from s_j to s_i. It is evident that $c_{ij} \subset c_{ij}$ *. In the matrix of the automaton for any i, j, and k we have $c_{ij} \neq c_{ik}$. This ratio expresses the condition of unambiguity of the transitions in the automaton. The following theorem is advanced in the article: Let there be given a system of n occurrences

$$\langle J \rangle A_1, \ldots, \langle J \rangle A_n, \qquad (5)$$

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where $A_1 \ldots, A_n$ are formulas containing no iterations; <D> is a set of all the words in the input alphabet. Then the minimum number of states of an automaton representing system (5) by outputs $1, \ldots, q_n$, respectively, will not exceed N + 1, where N is the total number of letters in the divergent form of the formula

$$A_1 \vee \ldots \vee A_n. \qquad (6)$$

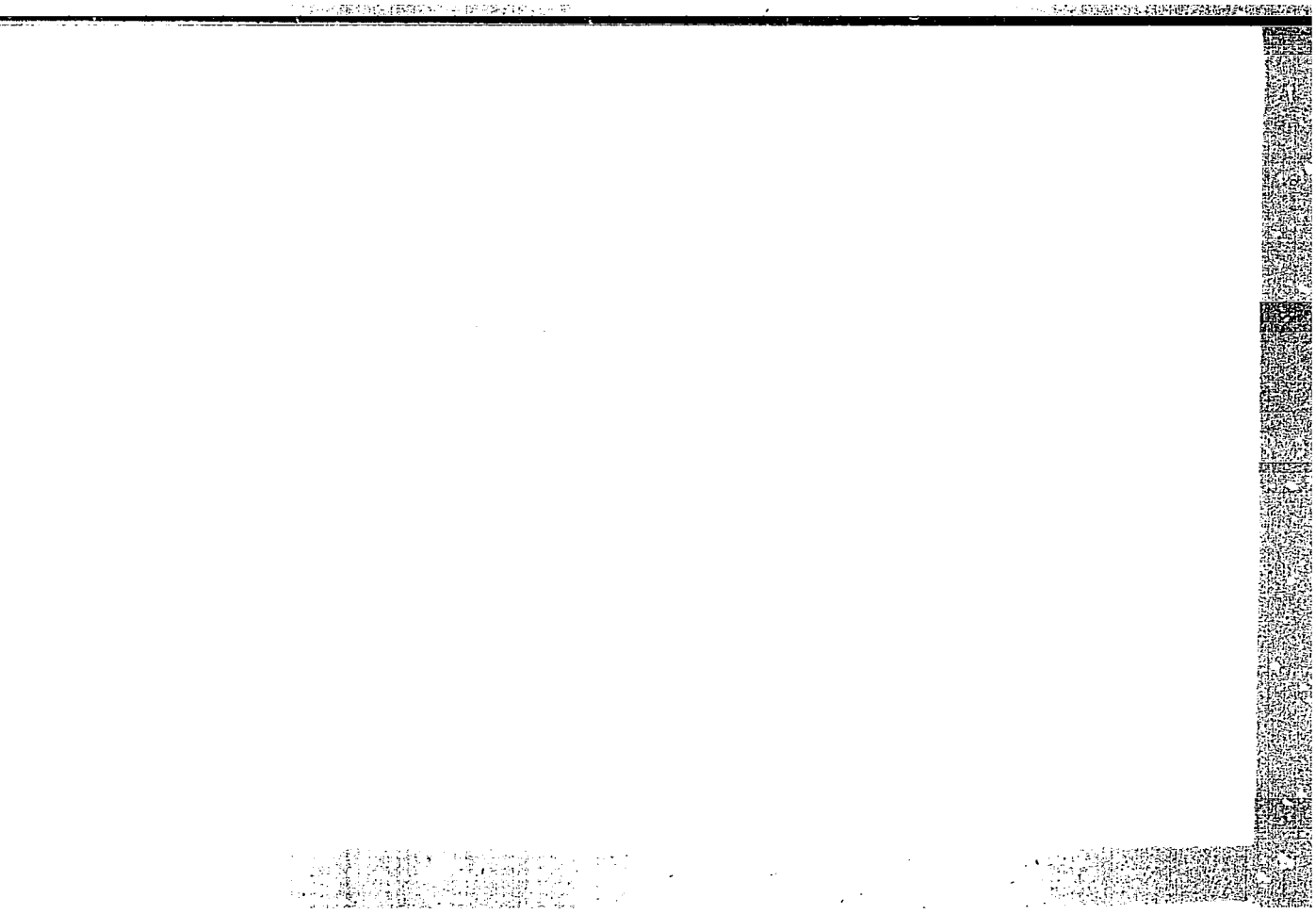
The idea of the algorithm for constructing this automaton is contained in the following evident lemma: Let there be given an event A and an automaton, in which there is separated an initial state s_0 and a subset of states F, such that: 1) for any state s of the automaton every word $P_A \subset A$ shifts the device from state s to $s_F \subset F$; 2) every word which shifts the device from s_0 to s_F can be represented in the form $P_1 P_A$, where $P_1 \in$ <D>, $P_A \in A$. Then the given automaton represents the occurrence <D> A by a set of states F. The steps involved in this algorithm are discussed in the article, another lemma is proposed and examples are given in the concluding section. Orig. art. has: 2 figures, 5 tables and 16 formulas.

ASSOCIATION: none

SUBMITTED: 14Nov63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: IE, DP NR REF SOV: 003 OTHER: 001

Card 3/3



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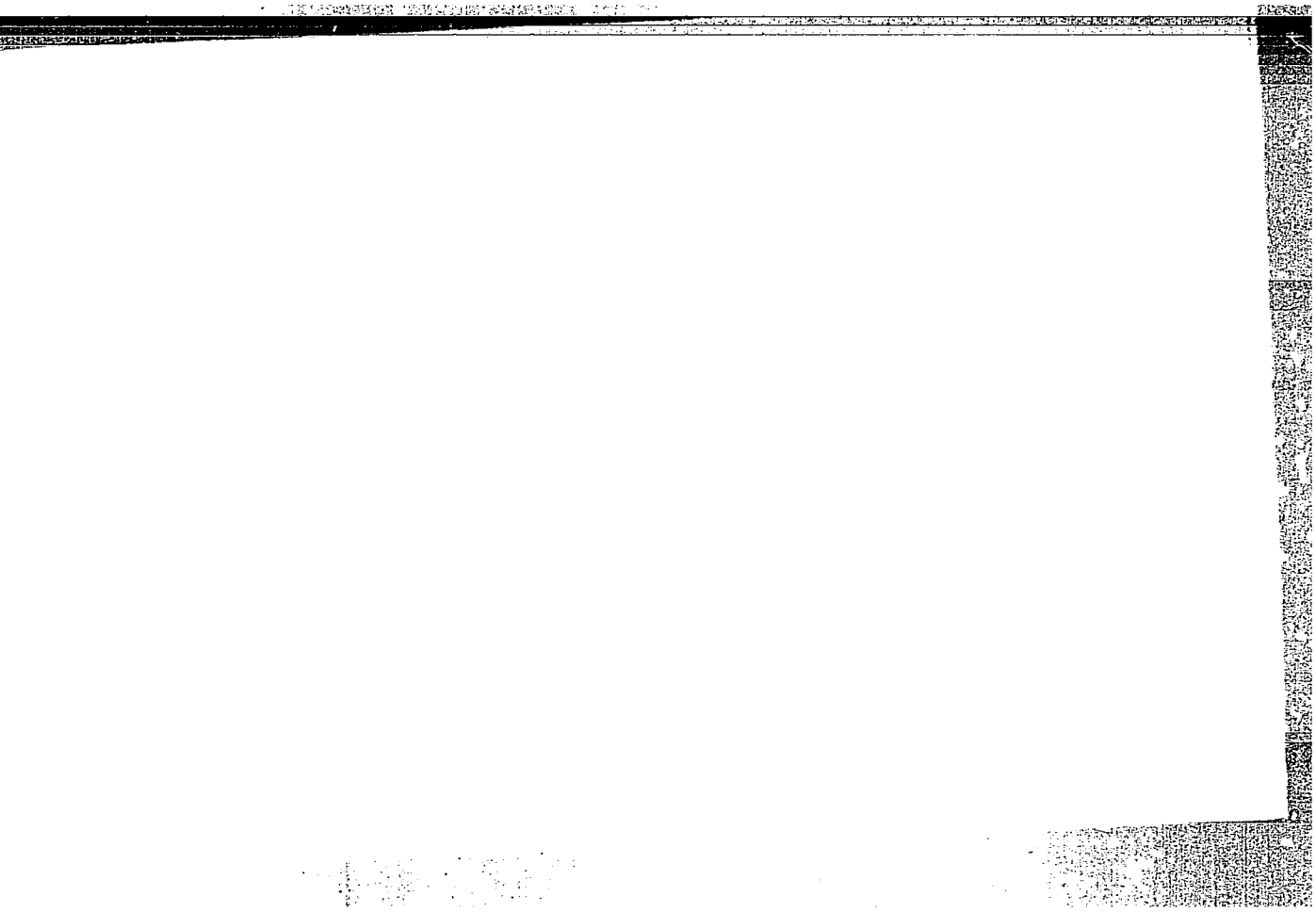


APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928130003-5"

KUZNETSOV, O.P. (Moskva)

Representation of regular events in asynchronous automata. Avtom. i telem. 26 no.6:1086-1093 Je '65. (MIRA 18:7)

KUZNETSOV, O.P. (Moskva)

Time analysis of autonomous asynchronous logical nets.
Avtom. i telem. 26 no.5:861-865 My '65.
(MIRA 18:12)

1. Submitted November 20, 1964.

KUZNETSOV, P.

Steady improvement of work organization. Rech. transp. 21 no.12:7 D '62. (MIRA 15:12)

1. Predsedatel' portovogo komiteta Astrakhanskogo porta.
(Inland water transportation--Employees)

KALININ, A. (poselok Mel'nichnyy Ruchey, Leningradskoy obl.); POPKOV, V., inzh. (Khar'kov); PERETS, F. (Bronnitsy, Moskovskoy obl.); KUZNETSOV, P. (Leningrad); MATVEYENKO, I., mekhanik (Alatyr'); KALINICHENKO, M. (Leningrad); IKKERT, G. (Otradnyy, Kuybyshevskoy obl.); DUDIKOV, N.; BUKANOV, A.

Readers suggest. Za rul. 21 no.7:18-19 Jl '63. (MIRA 16:8)
(Motor vehicles—Technological innovations)

KUZNETSOV, P.A., student V kursa; FILONETS, V.I., student V kursa

Using experience acquired in the Moscow Basin for improving stoping in Tula and Lipetsk region iron mines. Nauch.rab.stud. GNSO MGI no.5:37-53 '57. (MIRA 11:11)
(Moscow Basin--Stoping (Mining)) (Tula Province--Iron mines and mining) (Lipetsk Province--Iron mines and mining)

1. KUZNETSOV, P. [A.]

2. USSR (600)

4. Oak - Krasnodar Territory

7. 50 years of raising oak plantings in steppe forestry stations of Krasnodar Territory. Les. khoz. 6, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

MAL'TSEV, T.; KUZNETSOV, P.

New findings at the Shadrinsk Agricultural Experiment Station. Nauka i pered. op. v sel'khoz. 18 no.2:35-39 F '58. (MIRA 11:3)

1. Direktor Shadrinskoy sel'skokhozyaystvennoy opytnoy stantsii pri kolkhoze "Zavety Lenina," Kurganskiy rayon (for Mal'tsev). 2. Zamestitel' direktora po nauke Shadrinskoy sel'skokhozyaystvennoy opytnoy stantsii pri kolkhoze "Zavety Lenina," Kurganskiy rayon (for Kuznetsov). (Agricultural research)

KUZNETSOV, P.

Chemical weed control. Nauka i pered. op v sel'khoz. 9 no.6:39-41 Je '59. (MIRA 12:9)

1.Zamestitel' direktora Shadrinskoy opytnoy stantsii pri kolkhoze "Zavety Lenina."

(Herbicides)

KUZNETSOV, P. A.

Kostroma Province - Fruit Culture

Michurin fruit growers of Kostroma Province. Sad i og., no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

USSR/Agriculture - Fruit growing

Card 1/1 : Pub. 86 - 30/46

Authors : Kuznetsov, P. A.

Title : Repeated bearing of strawberries

Periodical : Priroda, 43/9, page 113, Sep 1954

Abstract : An account is given of the results of experiments in planting different kinds of strawberries and observing the growth of runners and the periods of bearing during the summer.

Institution : .....

Submitted : .....

KUZNETSOV, P.A.

Michurin's follower, plant breeder N.V. Kuz'min; on the 50th anniversary of his death. Trudy TSGL 6:587-592 '57.
(MIRA 12:10)

(Kuz'min, Nikanor Vonifat'evich, 1854-1907)

KUZNETSOV, P.

Effect of parental varieties on the transmission of features to progeny in horticultural crops. Agrobiologiia no.2:228-233 Mr-Ap '62. (MIRA 15:4)

1. Stavropol'skaya opytnaya stantsiya po sadovodstvu, g. Georgiyevsk. (Stavropol Territory--Fruit culture)

KUZNETSOV, P.A., monter

Location of damages in single-strand power cables with a high-frequency receiver using and electroacoustic method. Energetik 12 no.11:32-34 N '64 (MIRA 18:2)

FAYN, A.I., inzh.; UGARKIN, B.K., inzh.; KUZNETSOV, P.A., inzh.

Automatically-controlled sandslinger, model PN-40. Lit. proizv. no.1:14-19 Ja '66. (MIRA 19:1)

KUZHETSOV, P.F.

Setting up and repairing of nonsifting chain grate furnaces. Sakh. prom. 30 no.7:23-25 Jl '56. (MLRA 9:11)

1. Cherkasskiy rafinal'nyy zavod.
(Furnaces--Grates)

MAKASHEV, A.P.; KUZNETSOV, P.G., red.; SLUZHITEL', Ye.I., tekhn.red.

[Methods of prolonging the storage of refrigerated fish]
Sposoby udlineniia srokov khraneniia okhlazhdennoi ryby.
Moskva, Vses.in-t nauchn.i tekhn.informatsii, 1958. 36 p.
(MIRA 13:4)

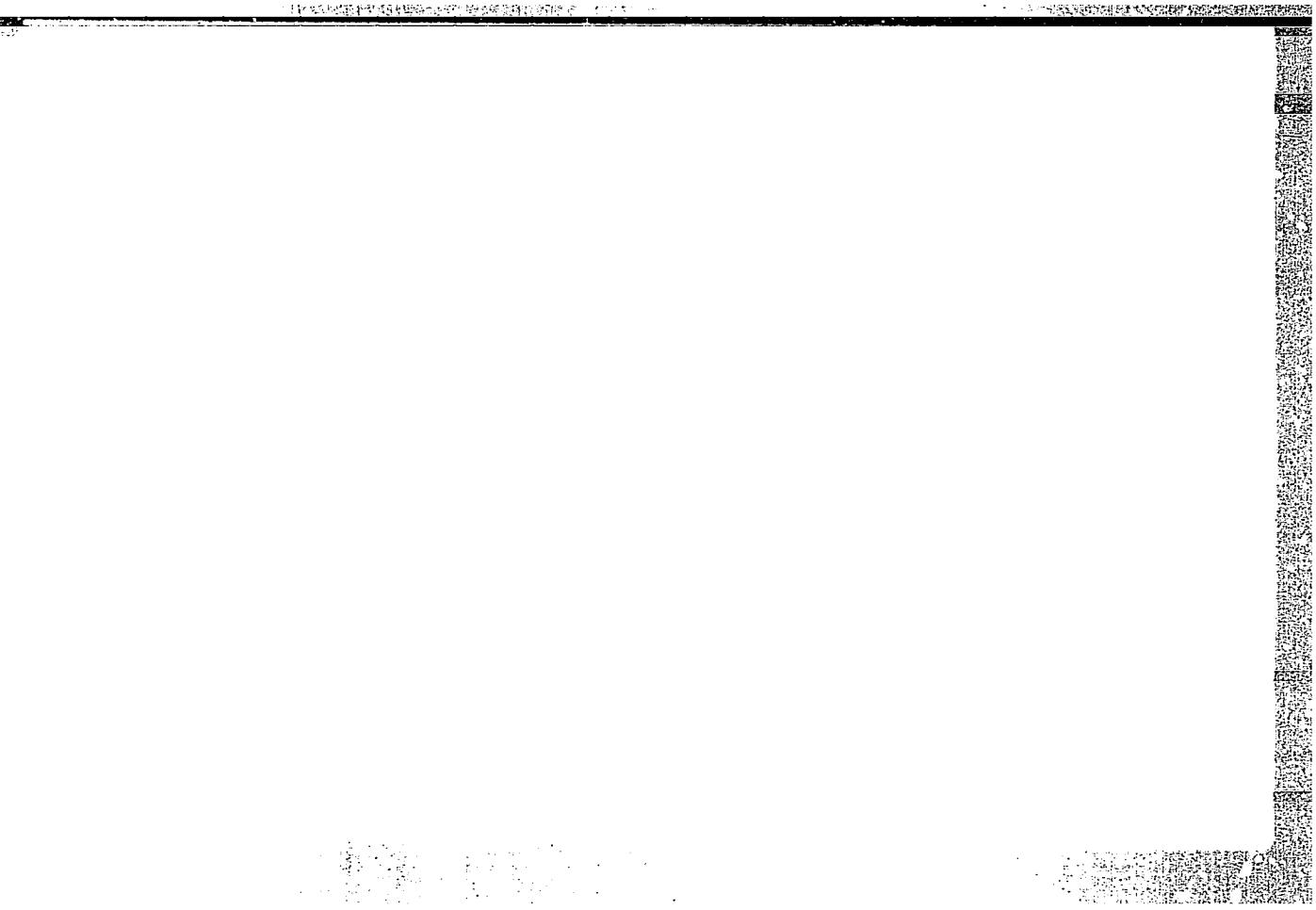
(Fish--Storage)

KAZNACHEYEV, V.P. (Novosibirsk); KUZNETSOV, P.G. (Novosibirsk); NABIULIN, [illegible] (Novosibirsk); SUBBOTIN, M.Ya. (Novosibirsk)

Some problems of the quantum biology and problems of the communication of information in biological systems. Avtometriia no.2:3-10 '65. (MIRA 18:9)

KUZNETSOV, P.O.

Seminar on chemical cybernetics. Zav.lab. 28 no.3:336-337 '62. (MIRA 15:4)
(Cybernetics--Congresses) (Chemistry, Technical)



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KHALAMEYZER, Mikhail Borisovich; KUZNETSOV, P.G., ved. red.; TKACHENKO, L.K., tekhn. red.

[Integrating devices of automatic compensators; survey of foreign literature] Integriruiushchie ustroistva avtomaticheskikh kompensatorov; obzor zarubezhnoi tekhniki. Moskva, GOSINTI, 1962. 14 p. (Tema 6) (MIRA 17:4)

L 32697-66 EWT(1) SCTB DD

ACC NR: AP6015232 (N) SOURCE CODE: UR/0410/65/000/002/0003/0010

AUTHORS: Kaznacheyev, V. P. (Novosibirsk); Kuznetsov, P. G. (Novosibirsk); Nabiulin, M. S. (Novosibirsk); Subbotin, M. Ya. (Novosibirsk)

65
B

ORG: none

TITLE: Some problems of quantum biology and problems of information transmission in biologic systems

SOURCE: Avtometriya, no. 2, 1965, 3-10

TOPIC TAGS: biology, quantum theory, tissue physiology, cell physiology, information storage and retrieval, information theory, data transmission, photon, blood

ABSTRACT: Theoretical prerequisites for information transmission in biologic systems by means of quantum fluxes are given. The ultraweak luminosity of blood and a nerve is recorded with a photon counter. The problem includes mechanisms for coding various factors of the medium in quantum fluxes and recording this information in chemical structures and mechanisms for retrieving the recorded quantum information from the chemical structures and utilizing this information in enzymatic-synthetic processes. Comparison of data on physics, chemistry, and information theory with experiments in mitogenetic research indicates the possibility of the existence of a highly efficient system of information transmission

Card 1/2 UDC: 57+61:62.506.2

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ACC NR: AP6015232 O

in biologic systems with a rate of about 10^{20} bits/sec per watt of consumed energy; the possibility of coding this information in chemical structures of varying complexity; and the possibility of effective conversion of this information to electric signals. The effect of one tissue culture on the growth of another through quartz glass is shown. Possible ways of using the mechanism of quantum information in technical devices are shown.

SUB CODE: 06/ SUBM DATE: 13Jan65/ ORIG REF: 033

Card 2/2 BLG

KUZNETSOV, Pavel Grigor'yevich; GOLOVKO, Ye.V., otv.red.; CHASOVIKOVA, Z.I., tekhn.red.

[Filing machine] Opilovochnyi stanok. Alma-Ata, TSentr.in-t nauchno-tekhn.informatsii, 1959. 26 p. (MIRA 13:9)
(Machine tools)

BIKYUKOV, Vladimir Vasil'yevich; KUZNETSOV, P.G., ved. red.; BARATOV, A.N., kand. tekhn. nauk, red.; TKACHENKO, L.K., tekhn. red.

[Brigade-type piling cranes and special-purpose piling devices in storerooms of industrial enterprises; survey of foreign equipment] Krany-shtabelery mostovogo tipa i spetsial'nye shtabeliruiushchie ustroistva na skladakh promyshlennykh predpriiatii; obzor zarubezhnoi tekhniki. Moskva, GOSINTI, 1962. 20 p. (Tema 8) (MIRA 17:4)

ANDREYEV, Grigoriy Yakovlevich; SHERZHUKOV, Geliy Yefimovich; SHEVCHENKO, Valentin Yakovlevich; LEV, Arkadiy L'vovich; SPAVKIN, I.P., ved. red.; KUZNETSOV, P.G., ved. red.; PENGLER, K.I., red.

[Manufacturing and using glass-reinforced plastic pipes; a survey of foreign technology] Proizvodstvo i primenenie stekloplastikovykh trub; obzor zarubezhnoi tekhniki. Moskva, GOSINTI, 1962. 89 p. (Tema 10) (MIRA 17:4)

KUZNETSOV, P.I.; RENGACH, V.N.; BANNOV, A.V., red. izd-va; GURDZHIYEVA, A.M., tekhn. red.

[Interesting new developments in technology] Interesnye tekhnicheskie novinki. Leningrad, Ob-vo po raspr. polit. i nauchn. znanii RSFSR, 1961. 110 p. (MIRA 15:12)

1. Sekretar' Oktyabr'skogo rayonnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza goroda Leningrada (for Kuznetsov).
2. Zaveduyushchiy Kabinetom novoy tekhniki i peredovogo opyta Oktyabr'skogo rayona goroda Leningrada (for Rengach).
(Technological innovations)

KUZNETSOV, Pavel Ivanovich, kand. ist. nauk; RATGAUZER, Mark Yakovlevich, kand. ist. nauk; LAVRIKOV, Yu.A., kand. ekon. nauk, nauchnyy red.; UDAL'TSOV, O.A., red.; GURDZHIYEVA, A.M., tekhn. red.

[Role of the intelligentsia in the struggle for technological progres; some forms of cooperation between science and industry] Rol' intelligentsii v bor'be za tekhnicheskii progress; formy sodruzhestva nauki i proizvodstva. Leningrad, Ob-vo po raspr. polit. i nauchn. znanii RSFSR, 1961. 64 p. (MIRA 15:2)
(Technology) (Research, Industrial)

KUZNETSOV, P.I.

Preparing clover sod for spring wheat in the trans-Ural region.
Zemledelie 7 no.4:26-30 Ap '59. (MIRA 12:6)

1. Shadrinskaya sel'skokhozyaystvennaya opytnaya stantsiya pri kolkhoze "Zavety Lenina," Shadrinskogo rayona, Kurganskoy oblasti.
(Siberia, Western--Wheat)
(Tillage)

KUZNETSOV, P.I.

Effectiveness of the new tillage system in crop rotations of a trans-Ural region collective farm. Zemledelie 7 no.9:38-47 S '59.
(MIRA 12:11)

1. Shadrinskaya sel'skokhozyaystvennaya opytnaya stantsiya pri kolkhoze "Zavety Lenina," Shadrinskogo rayona, Kurganskoy oblasti.
(Shadrinsk District--Tillage)

KUZNETSOV, P.I., veterinarnyy vrach.

Treating mastitis in cows. Veterinariia 34 no.5:54-55 My '57.
(MLRA 10:6)

1. Kalininskaya oblastnaya vetlechebnitsa.
(Udder--Diseases) (Cows--Diseases and pests)

KUZNETSOV, P. I., (Veterinary Surgeon)

"Treatment of Muscular Rheumatism."

Veterinariya, Vol. 38, No. 6, 1961. p. 57

Kuznetsov, P. I. - Kalinin oblast' Veterinary Hospital

KUZNETSOV, P.I.

KUZNETSOV, P.I.

Factory testing of the "RU-25" crane. Put' i put.khoz. no.12:30 D '57. (MIRA 10:12)

1. Starshiy inzhener Rel'sosvarochnogo tresta.
(Cranes, derricks, etc.--Testing)

KUZNETSOV, P.I., inzhener.

Changing the flood-line site in planning and building hydroelectric power stations. Sber.st.po geod. no.5:63-67 '53. (MLRA 9:7)
(Hydroelectric power stations) (Surveying)

AUTHORS: Kuznetsov, P. I., Tslaf, L. Ya. 57-28-6-15/34

TITLE: On the Problem of the Decay of a Liquid Jet Into Drops (K voprosu o raspade zhidkoy strui na kapli)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 6, pp. 1220 - 1223 (USSR)

ABSTRACT: The process of the forming of drops during the decay of a jet is being applied in an increasing degree in various fields of industry and agriculture, and frequently formed the object of investigations (Reference 1-6). Experiments showed that during the decay of a jet into drops the following zones can be observed: 1) That part of the jet which is close to the atomizer is compact, it has a glass-like appearance, some parts of the liquid are lacking, what is present are individual drops. 2) The divided part - the jet consists of separate parts of the liquid and of drops. 3) The atomized part - the jet has decayed into separate drops and consists only of drops. This report shows how to study the factors determining the degree of dispersion of the atomized part. Proceeding from physical considerations it must be assumed that the following quantities are of importance for the process of atomization:

Card 1/3

D-diameter of connecting piece, d- diameter of drops, ρ_g- density of the medium into which the liquid flows, ρ_{zh} - density of the liquid atomized by the atomizer, p_g- pressure of liquid leaving the atomizer, ν_g - coefficient of the kinematic viscosity of the medium into which the liquid flows, ν_{zh} - coefficient of the kinematic viscosity of the liquid which is atomized, σ- coefficient of the surface tension of the liquid, w- velocity of the emerging liquid, g - acceleration due to gravity. Most works deal with cases in which a certain liquid flows out into the air at normal atmospheric pressure. The experimental results obtained by studying the flowing out of water from the atomizing attachment of the tube into the air at normal pressure (figure 1) were worked out according to the interrelation $\frac{d}{D} = f$ (Fr,Ga). Working out of the experimental results in form of the function (6) is shown (figure 2). The experimental points relating to different Ga = const form a series of nearly

parallel straight lines, which are described by the formula $100 \frac{d}{D} = AFr^n$. Here it holds that $\lg A = 4.71 - 0.590 \lg GA$; $n = -0.508 + 0.0706 \lg Ga$. The formula (9) was obtained by the elaboration of experimental results by the method of the smallest squares (figure 3). It seems that the dependence (6) describes the decay process of the jet into drops in the 3.zone more accurately than was the case in previous works. The author thanks L. S. Eygenson (deceased) for his valuable advice. There are 3 figures and 10 references, 5 of which are Soviet.

SUBMITTED: July 26, 1957

1. Liquid jets—Decay 2. Fluid flow—Viscosity 3. Drops—Development 4. Mathematics

KUZNETSOV, P.I., veterinarnyy vrach

Treatment of muscular rheumatism. Veterinariia 38 no.6:57 Je '61. (MIRA 16:6)

1. Kalininskaya oblastnaya veterinarnaya lechebnitsa.
(Rheumatic fever) (Veterinary medicine)

EWT(d)/FCC(w)/BDS--AFFTC--IJP(C)
L 10794-63
ACCESSION NR: AP3001098 S/0208/63/003/003/0419/0430

AUTHOR: Bol'shev, L. N.; Kuznetsov, P. I. 53 52

TITLE: On evaluating the integral p(x,y) 14

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 3, no. 3, 1963, 419-430

TOPIC TAGS: approximation formula, p(x y) tabulation, Bessel function, probability theory

ABSTRACT: Using limit theorems for infinitely divisible distribution laws and in particular for noncentral χ^2 distributions, properties are established on the basis of which a series of new, sufficiently simple approximations of

$$p(x, y) = 2 \int_0^x ue^{-(u^2 + y^2)} I_0(2uy)du, \qquad (1)$$

are derived (where I_0 (2uy) is a Bessel function of the zero order which occurs

Card 1/2

L 10794-63
ACCESSION NR: AP3001098

in many problems of mathematical physics, probability theory, and mathematical statistics), and a method of composing compact tables of $p(x,y)$ values for all values of x and y is outlined. Necessary information concerning cylindrical functions is presented, and formulas establishing the relations between cylindrical functions and the noncentral χ^2 distribution function are derived and used to represent (1) as the product of an exponential function and the sum of two cylindrical functions. On the basis of this relation approximate formulas for evaluating (1) are derived, and means for making them more precise are analyzed. A detailed analysis of the tabulation of (1) according to the scheme proposed by A. N. Kolmogorov is presented. Orig. art. has: 39 formulas.

ASSOCIATION: none

SUBMITTED: 05Jul62 DATE ACQ: 10Jun63 ENCL: 00

SUB CODE: MM NO REF SOV: 010 OTHER: 010

Card 2/2

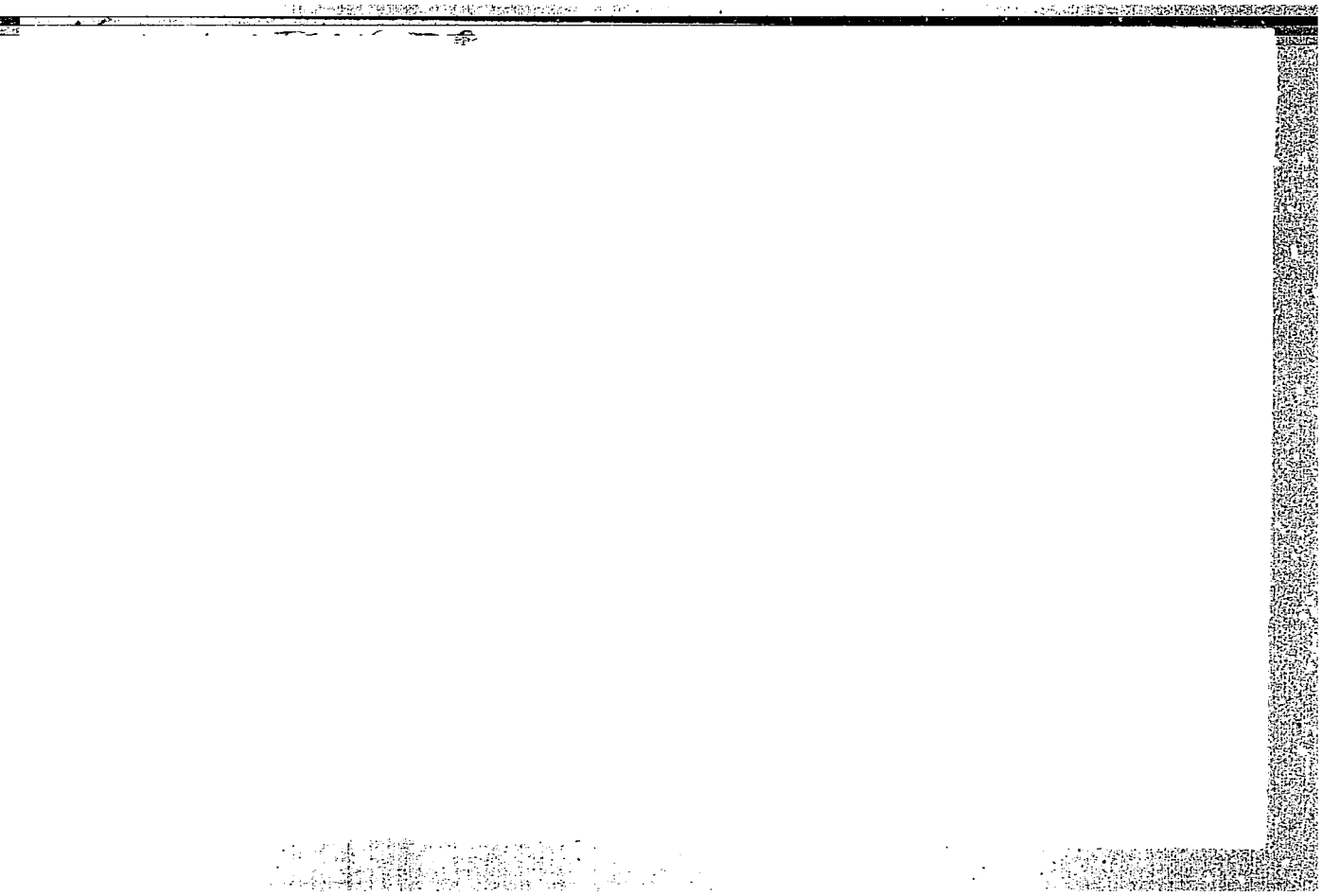
KUZNETSOV, Pavel Ivanovich; RENGACH, Vitaliy Nikitich; PROTASOV, K.G., prof., nauchn. red.; MAKUKHIN, V.L., red.; GURDZHIYEVA, A.M., tekhn. red.

[Interesting technological innovations] Interesnye tekhnicheskie novinki. Izd.2., perer. i dop. Leningrad, Obvo po raspr. polit. i nauchn. znanii RSFSR, 1962. 206 p. (MIRA 16:12)

1. Sekretar' Oktyabr'skogo rayonnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza g.Leningrada (for Kuznetsov).
2. Zaveduyushchiy Kabinetom novoy tekhniki i peredovogo opyta Oktyabr'skogo rayona g.Leningrada (for Rengach).
(Technological innovations)

BELYAKOV, Vasiliy Mikhaylovich; KRAVTSOVA, Raisa Ivanovna; RAPPOPORT, Moysey Genrikhovich; KUZNETSOV, P.I., doktor fiz.-matem. nauk, prof., otv. red.; YAKOVKIN, M.V., red.; SIMKINA, G.S., tekhn. red.

[Tables of elliptic integrals] Tablitsy ellipticheskikh integralov. Moskva, Izd-vo AN SSSR. Vol.2. 1963. 783 p. (MIRA 17:2)



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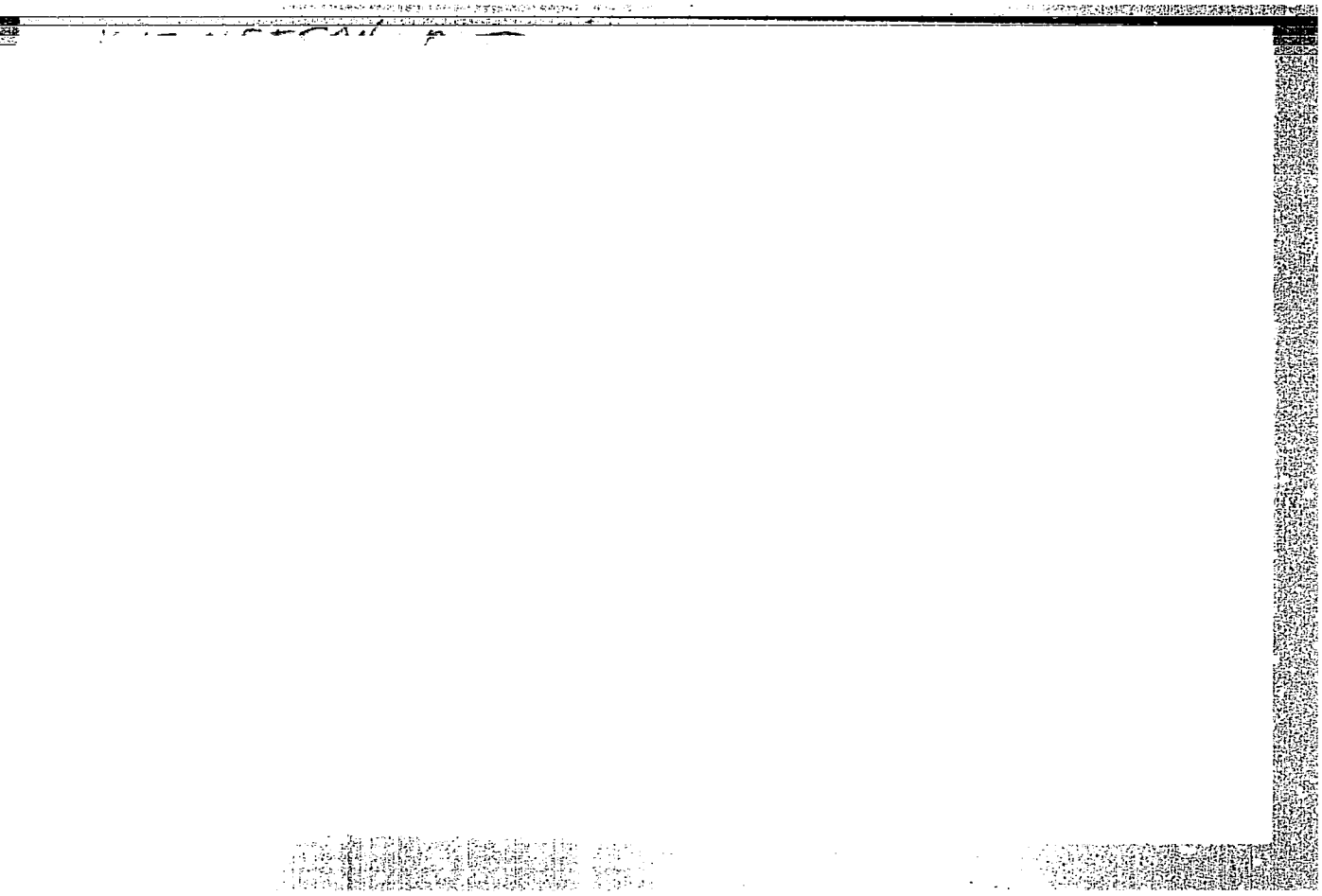


APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928130003-5"

KUZNETSOV, P. I.

USSR/Electronics — Nov/Dec 1947
Waves, Electromagnetic
Waves Propagation

"Propagation of Electromagnetic Waves Along Lines," P. I. Kuznetsov, Moscow, 6 pp

"Priklad Matemat i Mekhanik" Vol XI, No 6

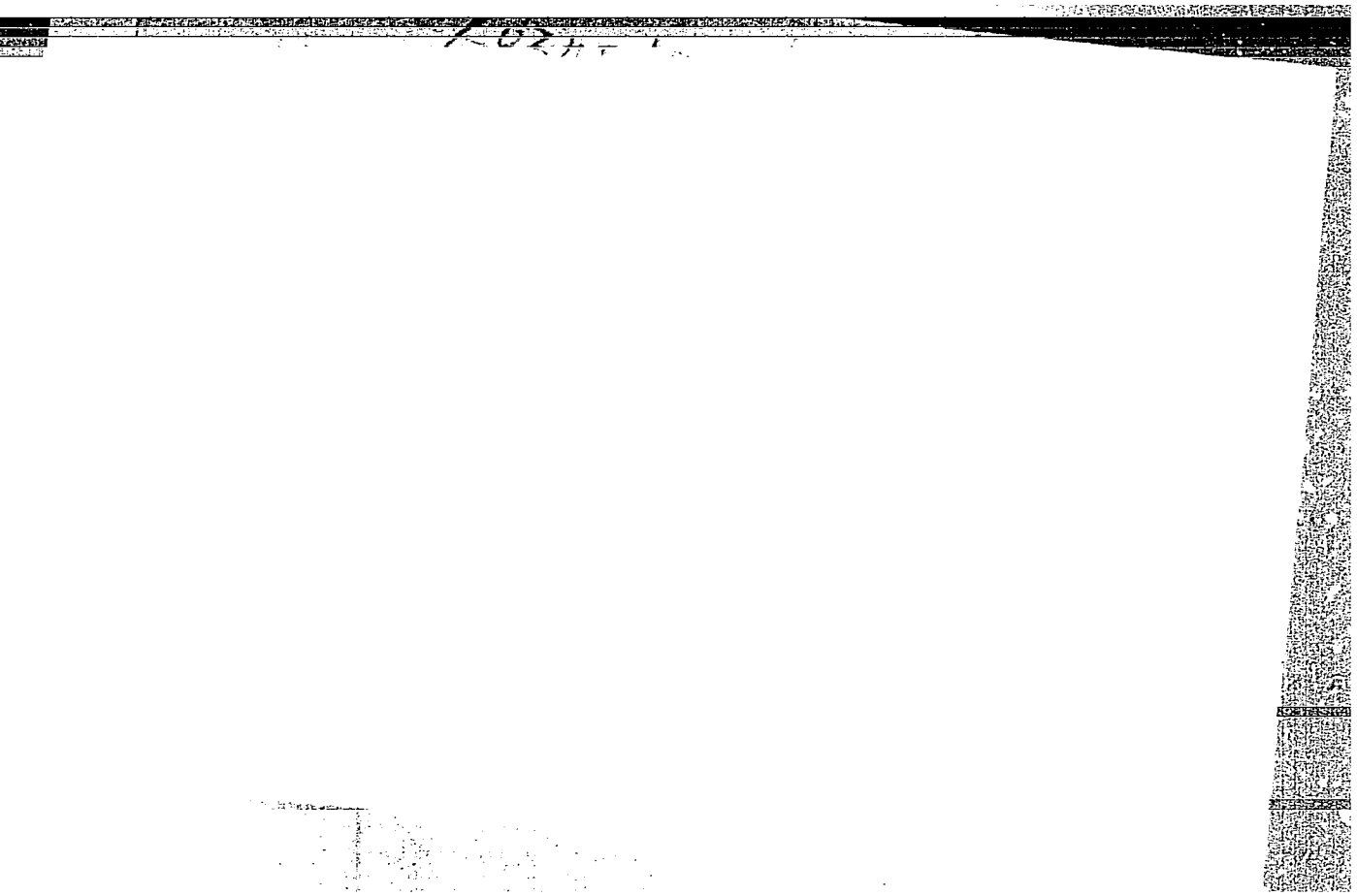
Several scientists have studied the problem of the propagation of electromagnetic waves along lines with limited and unlimited length. In most of these works, authors used a method of integration by which they arrived at approximate solutions. Author utilizes Lommer's function, derived through two imaginary argu-

[redacted] 52T20

USSR/Electronics (Contd) — Nov/Dec 1947

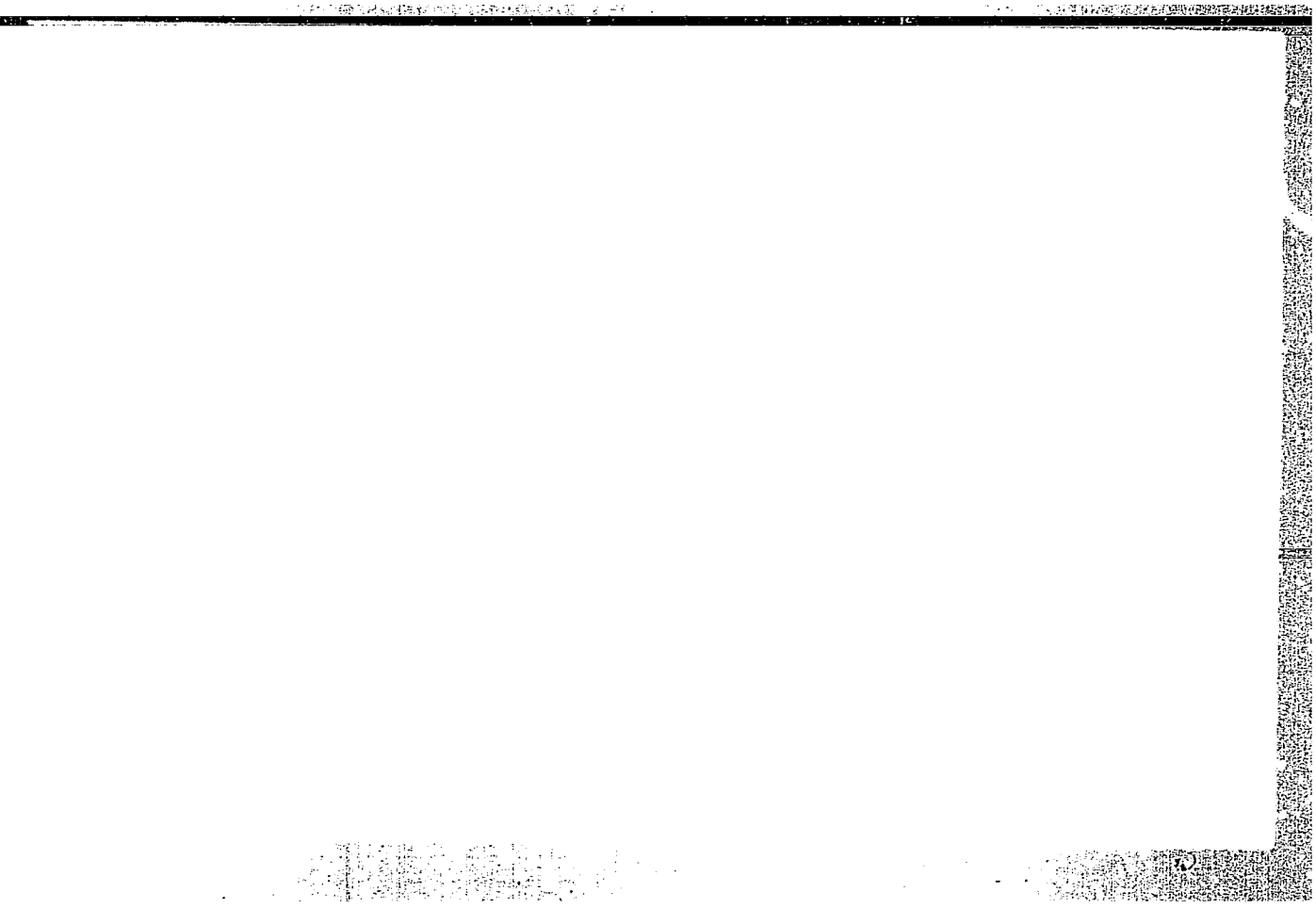
ments, to solve the case of a closed circuit. Utilizes Lommer's and Bessel's functions in particular. Submitted 29 Apr 1947.

[redacted] 52T20



KUZNETSOV, P.I.

"Method of Koshi Indexes for Determining the Quantity of Roots for a Whole, Rational Function Within a Given Circuit. Deduction of the Routh Criterion for the Negativity of Real Parts of All Roots of a Characteristic Equation With the Use of the Koshi Index Method. Deduction of the Hurwitz Criterion from Routh's Criterion and Proof of the Equivalence of the Two Criteria." Notes of the Seminar on the Theory of Stability of Motion, No. 3, Red Banner Order of Lenin Military Air Engineering Academy imeni N. Ye. Zhukovskiy, 1948.



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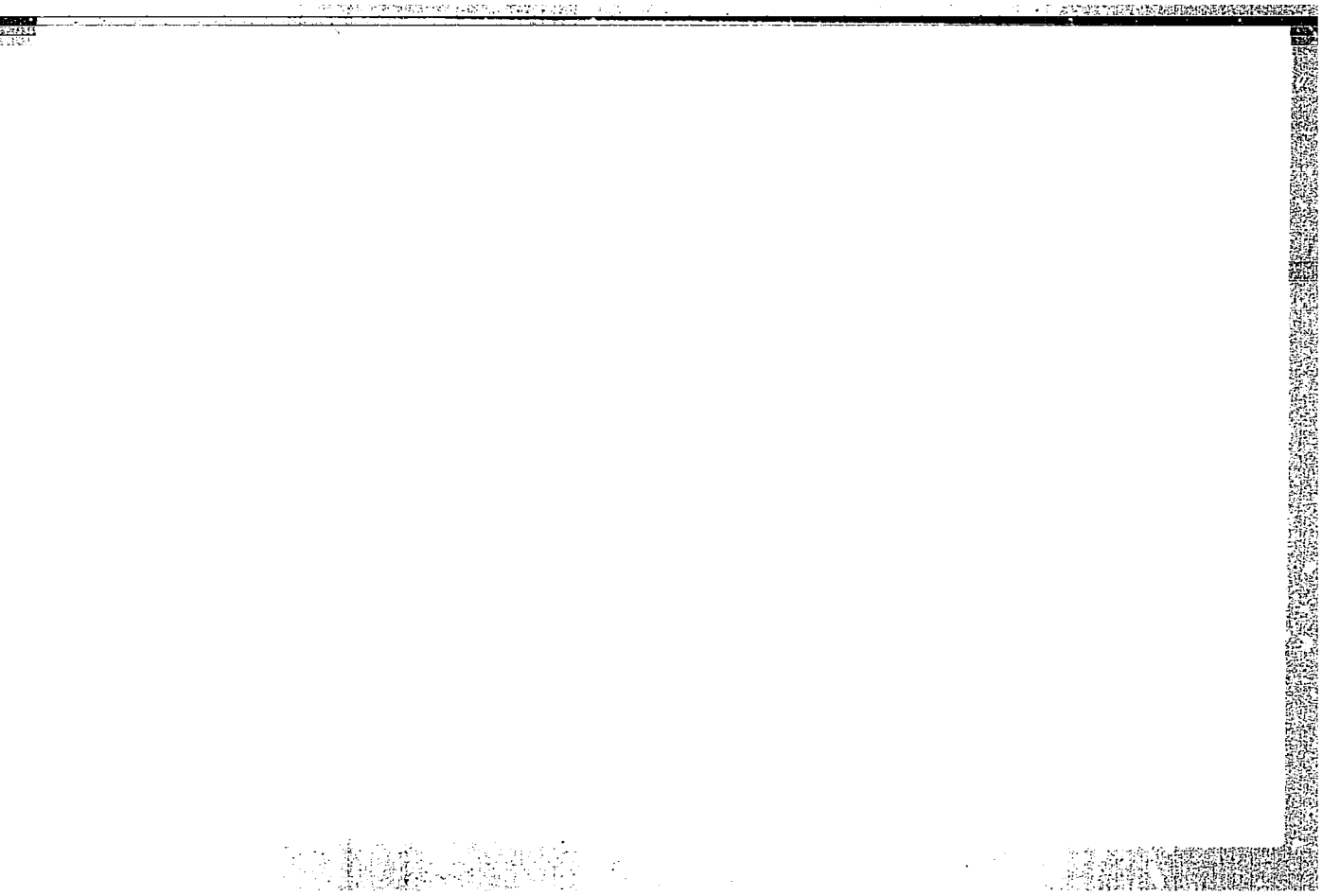

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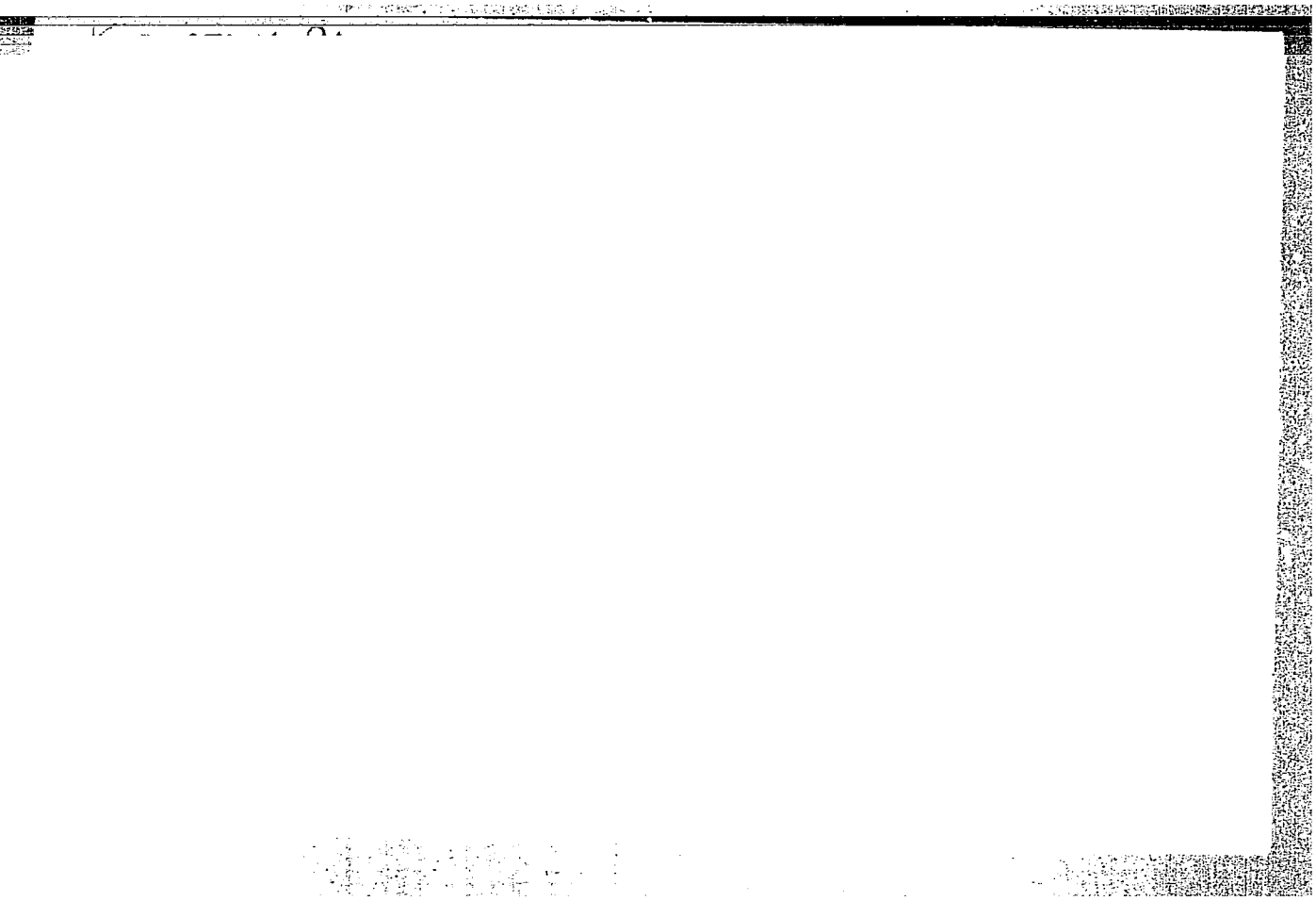

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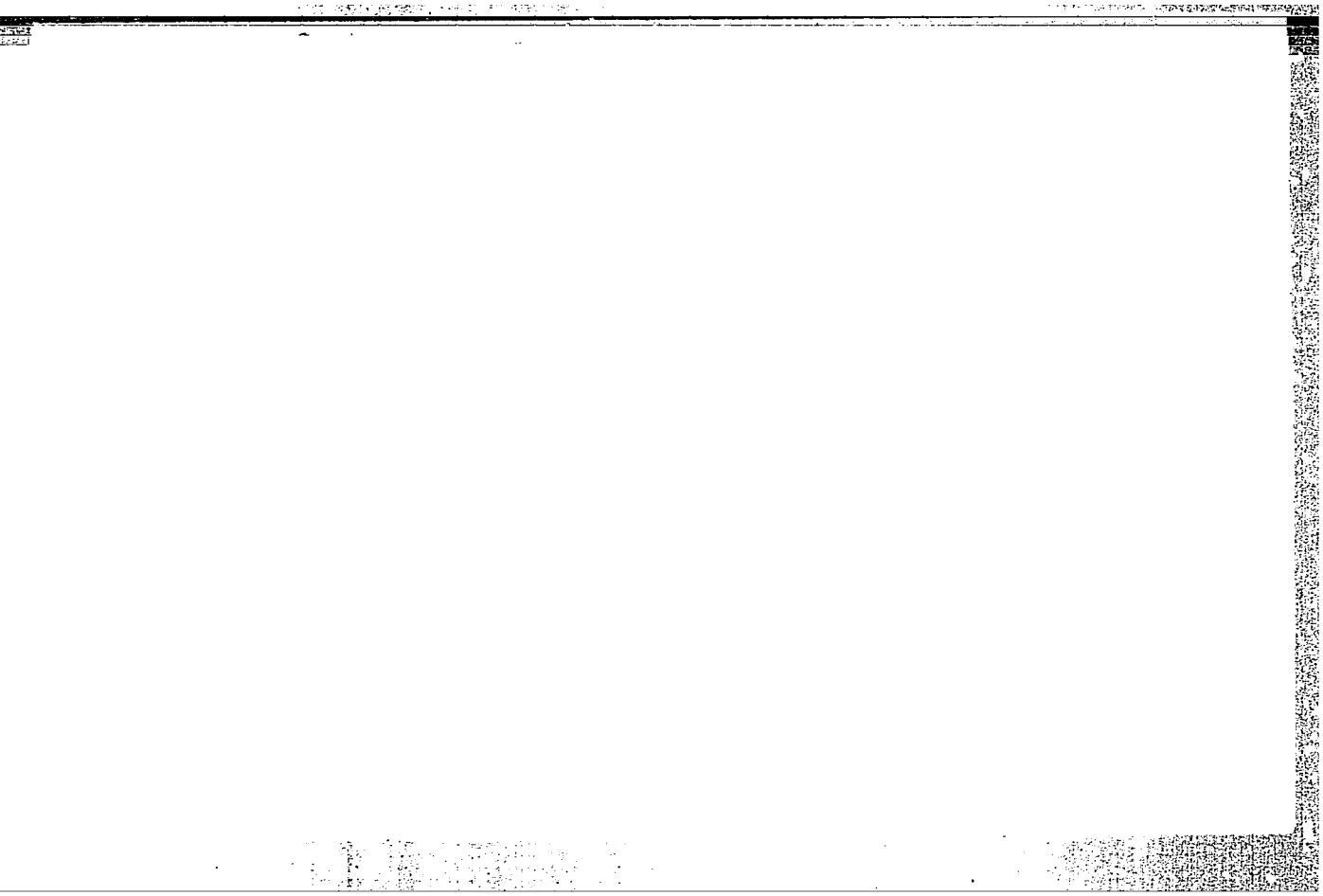

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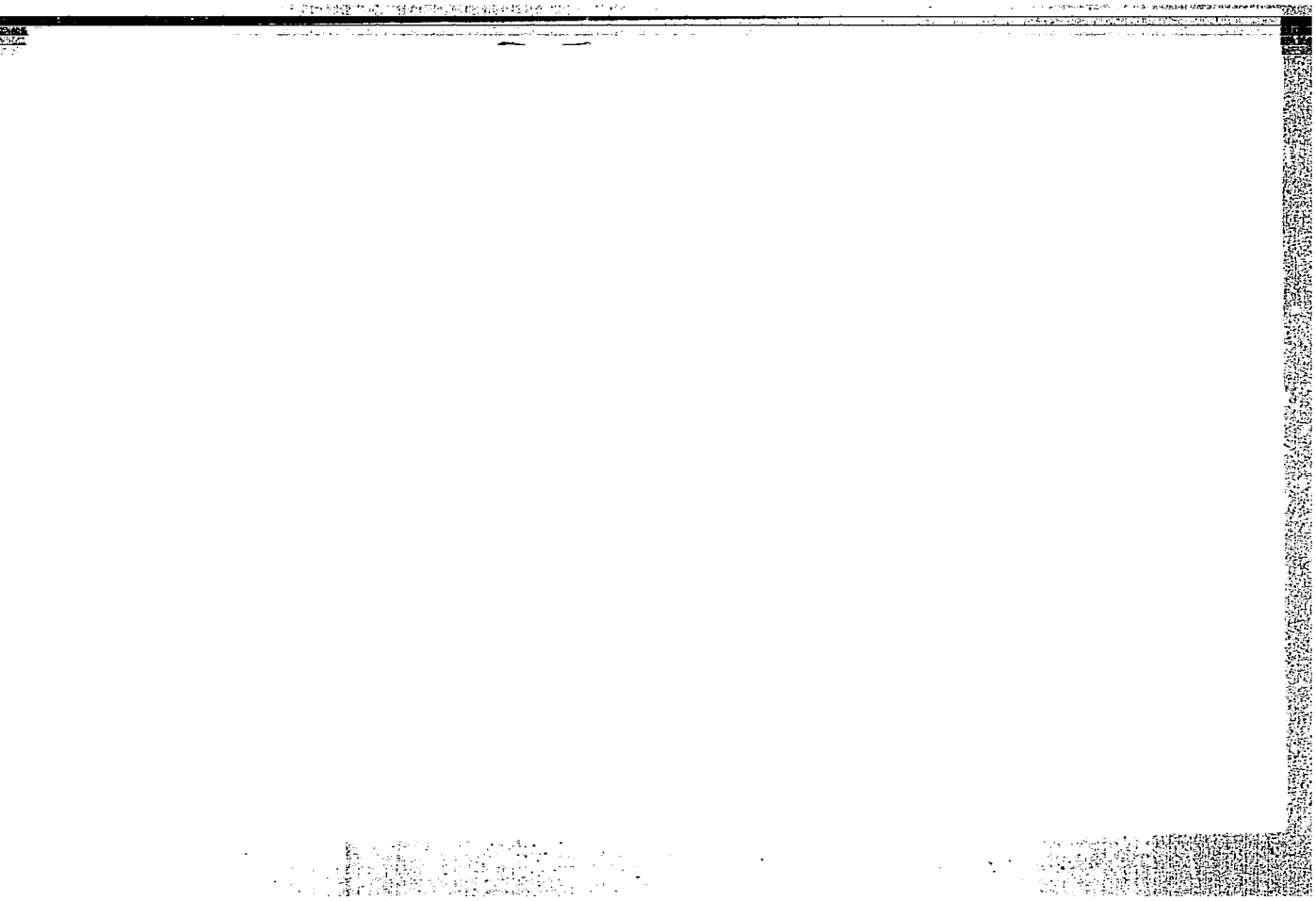

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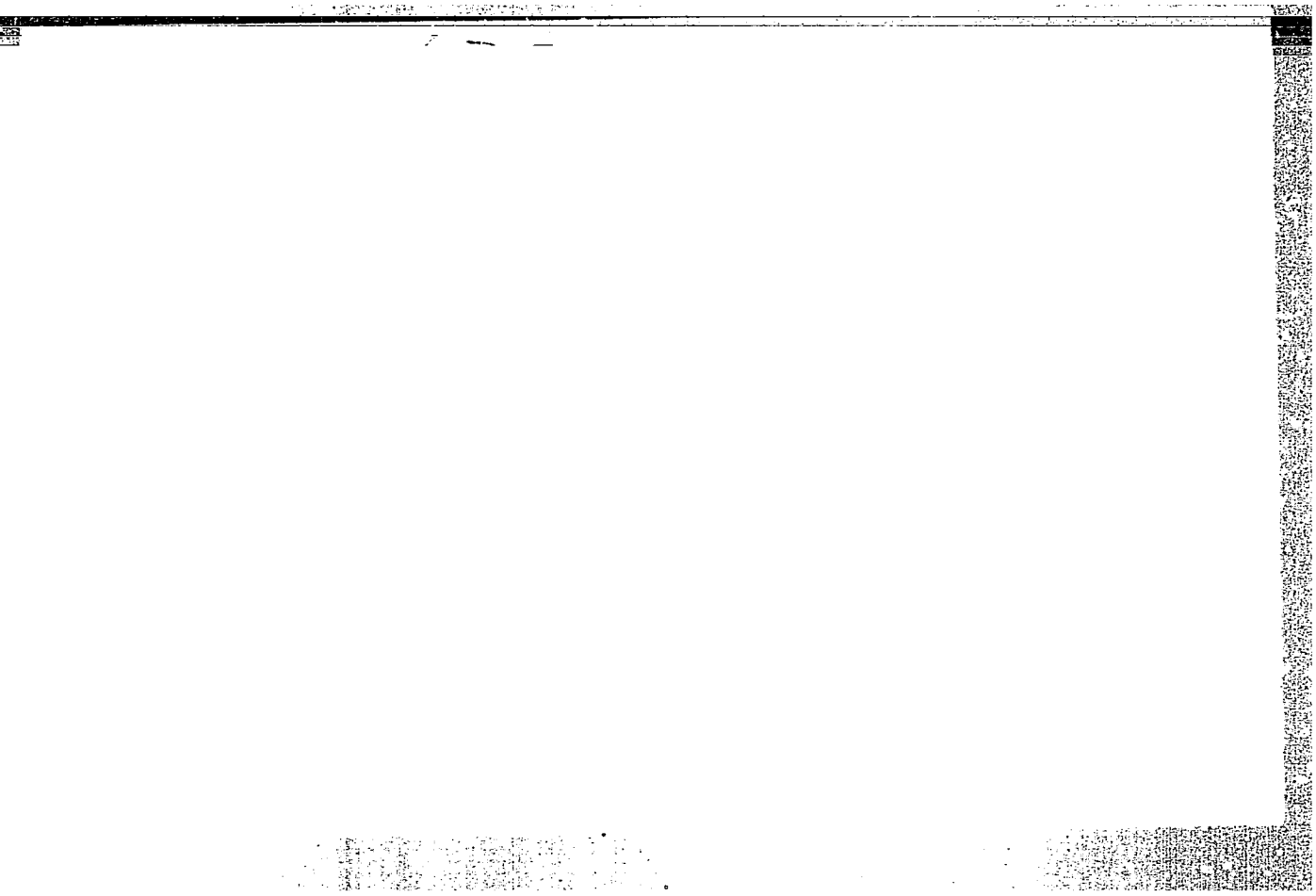

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KUZNETSOV, P. I.

USSR/Mathematics - Computational Methods — Mar/Apr 52

"N. N. Luzin's Works on Differential Equations and on Computational Methods," V. K. Gol'tsman, P. I. Kuznetsov

"Uspekh Matemat Nauk" Vol VII, No 2, (48), pp 17-30

Discusses how Luzin reduced N. Ye. Zhukovskiy and S. A. Chaplygin's eq of the motion of a train to $du/ds = f_1(u) + f_2(s)$, which he showed possessed only one limiting soln for certain conditions on $f_1(u)$. Later works of Luzin were connected with certain problems of automatic regulation, involving

214T52

the study of systems of linear differential eqs with const coeffs. Discusses Luzin's approx integration of differential eqs by S. A. Chaplygin's method and Luzin's calcn of the secular eq (determinant).

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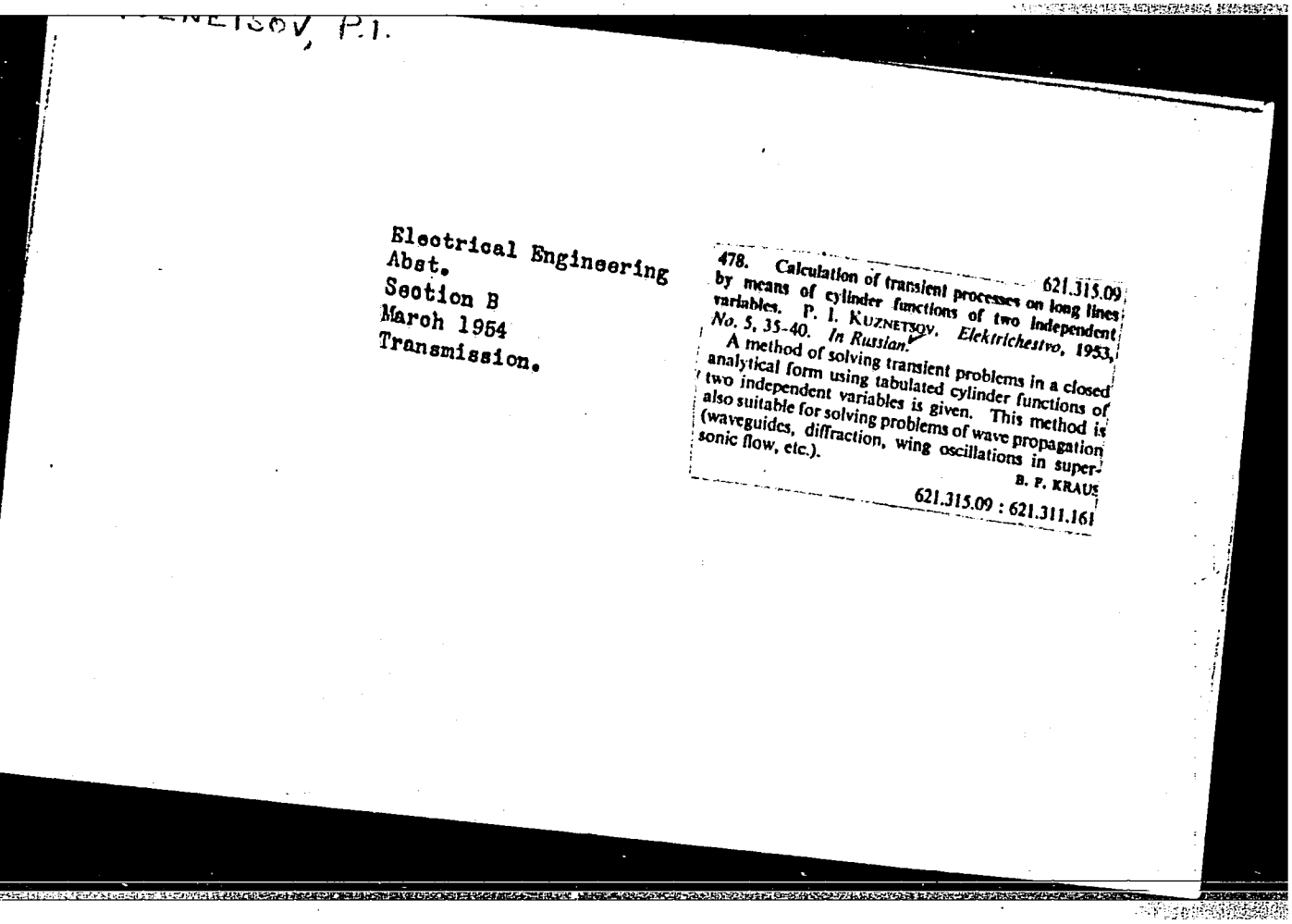


...NETSOV, P.I.

Electrical Engineering
Abst.
Section B
March 1954
Transmission.

478. Calculation of transient processes on long lines by means of cylinder functions of two independent variables. P. I. KUZNETSOV. *Elektrichestvo*, 1953, No. 5, 35-40. *In Russian.*

A method of solving transient problems in a closed analytical form using tabulated cylinder functions of two independent variables is given. This method is also suitable for solving problems of wave propagation (waveguides, diffraction, wing oscillations in supersonic flow, etc.).

B. P. KRAUS

621.315.09 : 621.311.161

621.315.09

KUZNETSOV, P.I.; STRATONOVICH, R.L.

Long heterogeneous lines. Radiotekhnika 8 no.6:14-22 N-D '53.
(Radio lines) (Radio, Shortwave) (MIRA 11:6)

KUZNETSOV, P. I., STRATONOVICH, R. L., TIKHONOV, V. I.

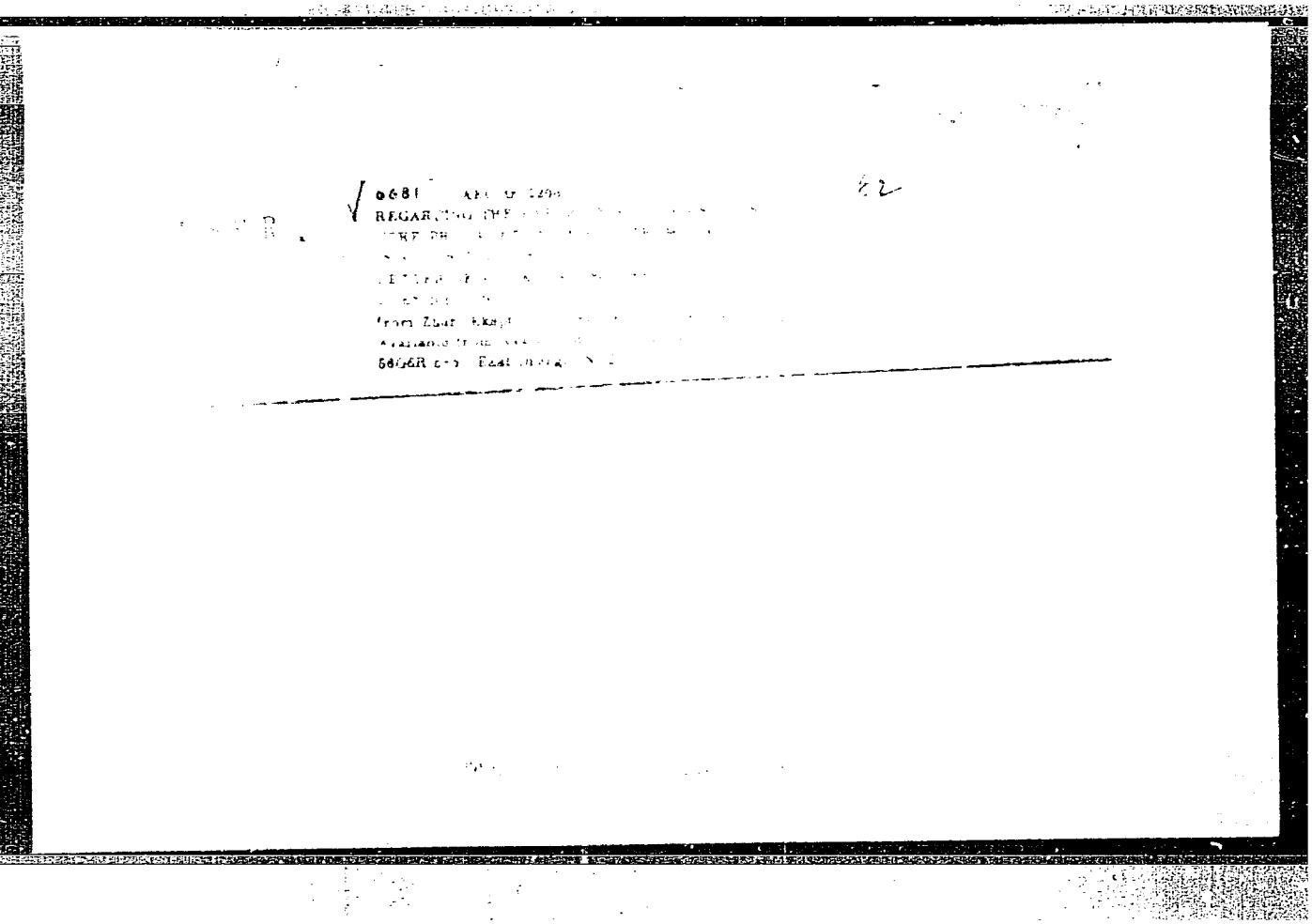
"Passage of Certain Random Functions Through Linear Systems", Avtomatika i Telemekhanida, Vol 14, No 2, 1953, pp 144-163.

Discusses linear systems in which the input and output of a signal is connected integrally by means of the kernel (the transfer function of a system), depending on the time and parameter.

Determines generalized correlative functions as coefficients of expansion of characteristic functions of n-multiple distributions of probabilities and establishes the correlations, binding the output correlative functions to the input functions. For the case of stationary output signals the characteristics of proximity of certain functions of the density of probability (sharp attenuation and possession of one peak) to the density of Gaussian distribution is discussed. Other results arising from transient random signals through linear systems, may be found in in the works of A. N. Kolmogorov (Jubilee Collection, Acad Sci USSR, Moscow, 1947), where full analysis of the case of stationary disturbances and constant transmitting function of the system is given; cf. V. S. Pugachev (Izvestiya Akademii Nauk. Seriya Matematika. 1953, No 5, 401-420) and Zadeh (Proc. J. R. E., 1950, Vol 38, No 11, 1342-1345). (RZhMekh, No 11, 1954)
SO: Sum. No. 443, 5 Apr. 55

KUZNETSOV, P.I. (Moskva); STRATONOVICH, R.L. (Moskva); TIKHONOV, V.I., (Moskva).

Transmission of random functions through nonlinear systems. Avtom. i telem. 14 no.4:375-391 Jl-Ag '53. (MLRA 10:3)
(Automatic control)



KUZNETSOV, P. I.

"Non-Homogeneous Transmission Lines," Radio Tekh., July, 1954

KUZNETSOV, P.I.

USSR/Electronics KUZNETSOV, P. I. FD 227

Card 1/1

Author : Kuznetsov, P. I. and Stratonovich, R. L.

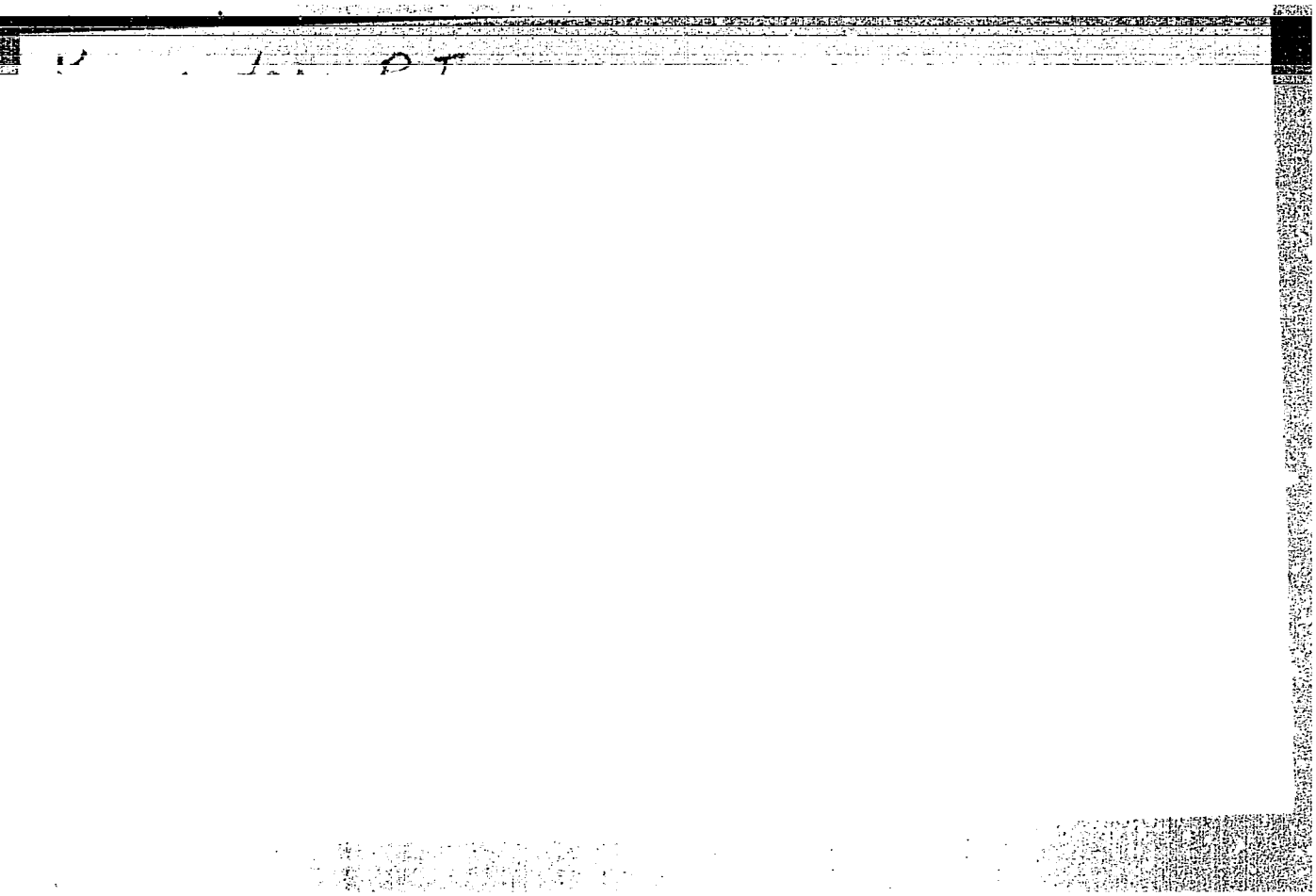
Title : The optimum transfer between two different uniform long lines

Periodical : Radiotekhnika 9, 13-20, Mar/Apr, 1954

Abstract : Rules are given for selecting the optimum transfer between two uniform lines with aid of a length of nonuniform line. The external parameters of a four-terminal network which is equivalent to a nonuniform line can be more economically calculated with Riccati's differential equation for the coefficient of reflection than with A. L. Fel'dshteyn's method. Minimum reflected power in the given frequency band is used as a criterion for optimum line. Four references: 4 USSR.

Institution :

Submitted : September 27, 1952



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928130003-5"

USSR/Electronics - Wave Propagation along wires FD-1056

Card Pub 90-4/12

Author : P. I. Kuznetsov and R. L. Stratonovich

Title : Non-homogeneous long lines with variable propagation factor

Periodical : Radiotekhnika 9, 43-45, Jul/Aug 1954

Abstract : Results of previous papers by the same authors (Radiotekhnika 8, Nov/Dec 1953; 9, Mar/Apr 54) were obtained on the assumption that the propagation factor is invariable all along a line. In the present paper the authors show that this limitation can be removed by replacing the variables in telegraphs equations, while they retain all the formulae obtained in their previous works. Three references; 2 USSR, 1953 and 1954. Tables.

Institution : --

Submitted : 27 September 1952

KUZNETSOV, P.I.

KUZNETSOV, P. I., STRATONOVICH, R. L., and TIKHONOV, V. I.

"Passage of Random Functions Across Nonlinear Systems,"
Avtomatika i telemekhanika, Vol 15, No 3, pp 200-205, 1954

Examines the nonlinear problem of the best approximation of some sunction f (t) by the method of choosing moment functions. When certain assumptions are made this problem reduces to the solution of a system of integral equations. One example is considered in which a system of algebraic equations replaces the integral equations.
(RZhMekh, No 4, 1955)

SO: Sum, No 606, 5 Aug 55

KUZMETSOV, P.I.; STRATONOVICH, R.L.; TIKHONOV, V.I.

Continuity of the products of probability functions. Zhur.tekh. fiz. 24 no.1:103-112 Ja '54. (MLRA 7:2)
(Probabilities) (Mathematical statistics)

KUZNETSOV, P. I.

USSR/Physics - Brownian Motion FD-620

Card 1/1 : Pub. 146-10/18

Author : Kuznetsov, P. I.; Stratonovich, R. L.; and Tikhonov, V. I.

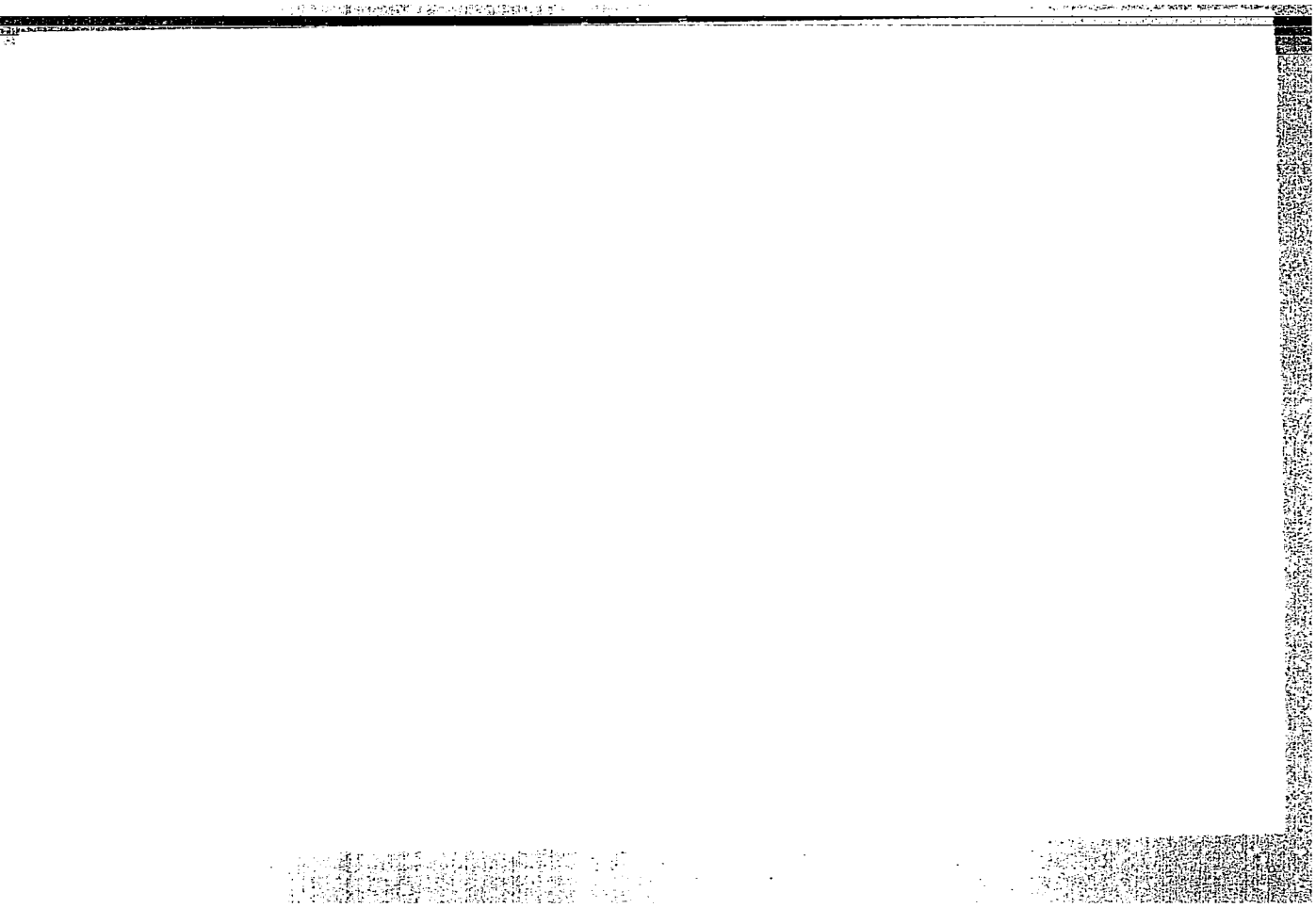
Title : Correlation functions in the theory of Brownian motion; Generalization of the Focker-Planck equation

Periodical : Zhur. eksp. i teor. fiz. 26, 189-207, February 1954

Abstract : Generalized correlation functions are used in a theory of Brownian motion which goes beyond the framework of Markov processes and uncorrelated random functions. For a sufficiently short time of correlation a differential equation is derived which generalizes the equation of Focker and Planck. It is shown that in special cases the theory discussed in this article reverts to the more usual theory of Brownian motion.

Institution : Moscow State University

Submitted : July 10, 1953



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KUZNETSOV, P. I.

AID P - 1451

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 2/36

Authors : Kuznetsov, P. I, and Stratonovich, R. L., Moscow

Title : Electromagnetic phenomena in a two-wire system

Periodical : Elektrichestvo, 2, 5-13, F 1955

Abstract : In the first part of the article, the authors examine a symmetric two-wire line on which an opposite wave is impressed. A correction is found to the propagation constant which depends on the conductivity of the wires. Expressions for the electric and magnetic fields of the above wave are obtained in series form.

The first terms of the series represent the first harmonics which depend on the proximity of the wires. This permits restriction to a small number of harmonics. The method of investigation is also applied to an infinite multi-wire

AID P - 1451

Elektrichestvo, 2, 5-13, F 1955

Card 2/2 Pub. 27 - 2/36

line. The authors demonstrate how to proceed to the successive higher approximations, attaining any desired accuracy. In the second part of the article, electromagnetic phenomena are examined in a line composed of two non-identical conductors. The wave in such a line appears to be a superposition of two partial waves spreading with different propagation constants. 7 references (1 German 1900, 6 Russian 1937-1954)

Institution: None

Submitted : Jl 18, 1954

USSR/Physics - Electric fluctuations FD-2196

Card 1/1 Pub. 146-1/25

Author : Kuznetsov, P. I.; Stratonovich, R. L.; Tikhonov, V. I.

Title : The action of electric fluctuations upon the tube oscillator

Periodical : Zhur. eksp. i teor. fiz. 28, 509-523, May 1955

Abstract : The authors consider the action of "slow" normal fluctuations upon a tube oscillator. They obtained expressions for the one-dimensional functions of the probability density for amplitude and phase. They indicate an approximate method for the calculation of the correlation functions for amplitude and phase. Their method of solving the behavior of a tube oscillator under the action of slowly varying fluctuations is based upon the application of the generalized Einstein-Focker equation (P. I. Kuznetsov et alii, ibid. 26, 1954) and is somewhat different from earlier method (L. Pontryagin, A. Andronov, A. Vitt, ibid. 3, 1933; I. L. Bershteyn, Izv. ANSSSR, ser. fiz. 14, 1950) for considering internal fluctuations. The authors thank Yu. B Kobzarev. Six references: e.g. A. A. Andronov and S. P Khaykin, Teoriya kolebaniy (Theory of oscillations), State Technical Press, 1937.

Institution : Moscow State University

Submitted : June 15, 1954

KUZNETSOV, P.I.

CARD 1 / 2 PA - 1590

SUBJECT USSR / PHYSICS
AUTHOR BAKAEV,JU.N., KUZNECOV,P.I.
TITLE The Mean Value Method and its Application to Some Nonlinear Tasks in Radio Engineering.
PERIODICAL Radiotechnika, 11, fasc.10, 3-12 (1956)
Issued: 11 / 1956

The generalization of the mean value method and its full mathematical foundations were given by N.N.BOGOLJUBOV (1945). A form, into which the initial differential equations of the system are put, takes up a certain space in his theory. These systems have the form $\frac{dx_i}{dt} = \varepsilon X_i (t, x_1, x_2, \ldots\ldots, x_n)$, $i = 1, 2, \ldots\ldots, n$

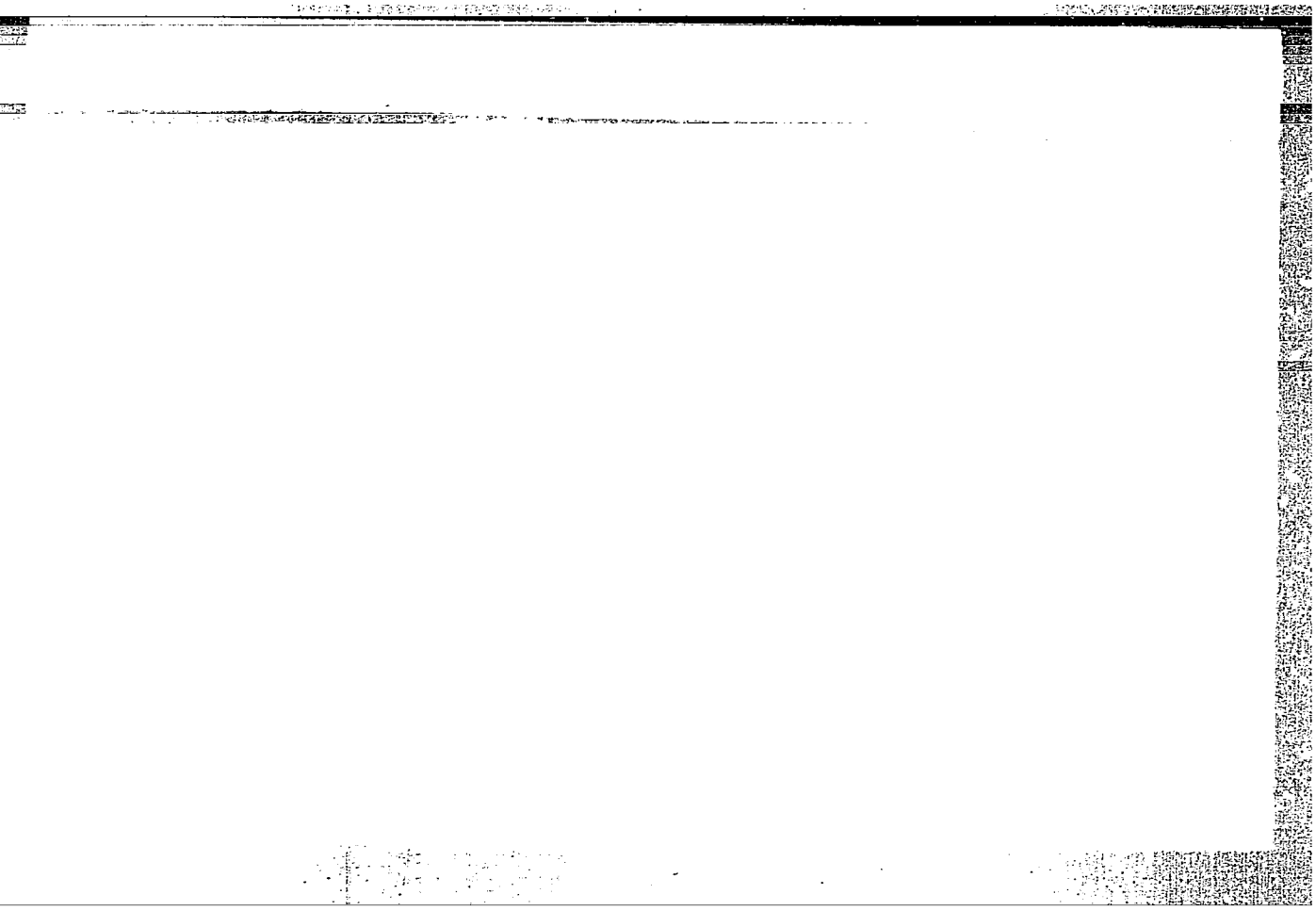
ε is the "small parameter". In the further course, and if nothing special is mentioned, only a differential equation of the first order:

$$\frac{dx}{dt} = \varepsilon X (t, x)$$

is mentioned. BOGOLJUBOV generalized the procedure to a considerable extent and defined averaging as follows:

$$X_o(x) = \lim_{T \to \infty} \frac{1}{T} \int_o^T X (t,x)\, dt$$

In this form it can be applied to non-periodic functions and even to functions that have no oscillation properties. BOGOLJUBOV proved several theorems which belong to the most interesting cases found in practice. From these it follows



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928130003-5"

KUZNETSOV, P.I.; STRATONOVICH, R.L.

Mathematical theory of correlated random points. Izv.AN SSSR.Ser. mat. 20 no.2:167-178 Mr-Ap '56. (MLRA 9:11)

1. Predstavleno akademikom A.N. Kolmogorovym.
(Distribution (Probability theory))
(Correlation (Statistics))

KUZNETSOV, P.I.; STRATONOVICH, R.L.; TIKHONOV, V.I. (Moskva)

Quasi-moment functions in the theory of random processess. Teor. veroiát. i ee prim. 5 no.1:84-102 '60. (MIRA 13:10)
(Probabilities)

KULEBAKIN, V.S., akademik, otv.red.; BODNER, V.A., doktor tekhn.nauk, red.; IVAKHNENKO, A.G., doktor tekhn.nauk, red.; ISHLINSKIY, A.Yu., akademik, red.; KACHANOVA, N.A., kand.tekhn.nauk, red.; KUZNETSOV, P.I., doktor fiz.-matem.nauk, red.; KUKHTENKO, A.I., doktor tekhn.nauk, red.; PETROV, B.N., red.; POPOV, Ye.P., doktor tekhn.nauk, red.; ULANOV, G.M., doktor tekhn.nauk, red.; KHRENOV, K.K., akademik, red.; CHIMAYEV, P.I., kand.tekhn.nauk, red.; CHUMAKOV, N.M., kand.tekhn.nauk, red.; KRUGLOV, G.V., tekhn.red.

[Invariancy theory and its application to automatic devices] Teoriia invariantnosti i ee primenenie v avtomaticheskikh ustroistvakh; trudy soveshchaniia. Moskva, Akad.nauk USSR, Otd-nie tekhn.nauk, 1959. 381 p. (MIRA 13:7)

1. Soveshchaniye po teorii invariantnosti i eye primeneniyu v avtomaticheskikh ustroystvakh, Kiyev, 1958. 2. AN USSR (for Ishlinskiy, Khrenov). 3. Chlen-korresp.AN SSSR (for Petrov). (Automatic control)

BAKAYEV, Yu.N.; KUZNETSOV, P.I.

Comparative investigation of consecutive and parallel methods of frequency division. Radiotekhnika 15 no.4:42-49 Ap '60. (MIRA 13:6)

1. Deystvitel'nyye chleny Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni A.S.Popova.

(Frequency changers)

SHELKOVNIKOV, Feodosiy Alekseyevich; TAKAYSHVILI, Konstantin Georgiyevich; KUZNETSOV, P.I., prof., doktor fiz.-mat.nauk, red.; TAL'SKIY, D.A., red.; VORONINA, R.K., tekhn. red.

[Collection of exercises in operational calculus] Sbornik uprazhnenii po operatsionnomu ischisleniiu. Pod red. P.I. Kuznetsova. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 150 p. (MIRA 15:2)

(Calculus, Operational)

KUZNETSOV, P.I. (Moskva)

Asymptotic expansion of cylindrical functions of two imaginary variables. Zhur.vych.mat.i mat.fiz. 1 no.4:571-589 Jl-Ag '61. (MIRA 14:8)

(Bessel's functions) (Series)

KUZNETSOV, P.I.; STRATONOVICH, R.L.; TIKHONOV, V.I. (Moscow)

Some problems involving conditional prob lity and quasi-moment functions. Teor. veroiat. i ee prim. 6 no.4:458-464 '61. (MIRA 14:11)

(Probabilities)

BARK, L.S.; KUZNETSOV, P.I.; DITKIN, V.A., prof., otv. red.; ORLOVA, I.A., red.; KORKINA, A.I., tekhn. red.

[Tables of cylindrical functions of two imaginary variables] Tablitsy tsilindricheskikh funktsii ot dvukh mnimykh peremennykh. Moskva, Vychislitel'nyi tsentr AN SSSR, 1962. 263 p. (MIRA 15:7)

(Functions)

BELYAKOV, Vasiliy Mikhaylovich; KRAVTSOVA, Raisa Ivanovna; RAPPOPORT, Moisey Genrikhovich; KUZNETSOV, P.I., doktor fiz.-matem. nauk, prof., otv. red.; YAKOVKIN, M.V., red.; BRUZGUL', V.V., tekhn. red.; SIMKINA, G.S., tekhn. red.

[Tables of elliptic integrals]Tablitsy ellipticheskikh integralov. Moskva, Izd-vo Akad. nauk SSSR. Vol.1. 1962. 655 p. (MIRA 15:12)
(Functions, Elliptic) (Mathematics--Tables, etc.)

BARK, L.S.; BOL'SHEV, L.N.; KUZNETSOV, P.I.; CHERENKOV, A.P.; DITKIN, V.A., prof., otv. red.; ORLOVA, I.A., red.

[Rayleigh-Rice tables of distribution] Tablitsy raspredeleniia Relaia-Raisa. Moskva, Vychislitel'nyi tsentr, 1964. 245 p. (MIRA 18:1)